BENGAL
DISTRICT
GAZETTEERS

ENGAL DISTRICT GAZETTEERS.

PALAMAU.

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INDIAN CIVIL SERVICE.

CALCUTTA:

THE BENGAL SECRETARIAT BOOK DEPÔT.

1907.

PLAN OF CONTENTS.

TABLE OF CONTENTS.

CHAPTER I.

PHYSICAL ASPECTS.

CHAPTER II.

HISTORY.

CHAPTER III.

THE PEOPLE.

CHAPTER IV.

PUBLIC HEALTH.

CHAPTER V.

FORESTS.

CHAPTER VI.

AGRICULTURE.

CHAPTER VII.

NATURAL CALAMITIES.

CHAPTER VIII.

RENTS, WAGES AND PRICES.

CHAPTER IX.

OCCUPATIONS, MANUFACTURES AND TRADE.

CHAPTER X.

MEANS OF COMMUNICATION.

CHAPTER XI.

LAND REVENUE ADMINISTRATION.

CHAPTER XII.

GENERAL ADMINISTRATION.

CHAPTER XIII.

LOCAL SELF-GOVERNMENT.

CHAPTER XIV.

EDUCATION.

CHAPTER XV.

GAZETTEER.

GAZETTEER

OF THE

PALAMAU DISTRICT.

CHAPTER I.

PHYSICAL ASPECTS.

THE district of Pālāmau, the westernmost district of the Chotā Nāgpur Division, lies between 23° 20′ and 24° 39′ north latitude and between 83° 20′ and 84° 58′ east longitude. It contains an area of 4,914 square miles and a population, according to the census of 1901, of 619,600 souls. The principal town and administrative headquarters is Daltonganj situated on the Koel river in 24° 3′ N. and 84° 4′ E. GENERAL DESCRIPTION.

The origin of the name Palāmau is doubtful. According to one account,* it is derived from the Hindī word *palānā*, "to flee," and means a place of refuge. Another suggestion is that the name is a combination of *pālā*, meaning frost, and *mu*, the patois root for dead, the whole word meaning dead from frost; and it is pointed out that during the winter months the district is liable to severe frosts.† Both these explanations, however, must be regarded as purely speculative. It is more probable that Palāmau is a Dravidian name, and it has been suggested that it may be a corruption of *pall-amm-ū; pall* meaning tooth, and *amm* (which, when combined with another noun, assumes the form *ām*) meaning water, while *ū* is a kind of genitive or possessive case, meaning village, country, fortress, etc. ‡ In support of this theory, it may be mentioned that the name is spelt Palāmū in the vernacular and was originally applied to the village which Origin of name.

* L. R. Forbes, *Settlement Report*, 1872.

† D. H. E. Sunder, *Settlement Report*, 1898.

‡ I am indebted to the Revd. F. J. Hahn for this suggestion. It may be noted that names of places ending in *ū* are not uncommon in the district, *e.g.*, Chemū, Duthū, Gārū, Kutmū, Murū, Musurmū and Sarjū.

was the seat of the Chero chiefs, and in which their forts were erected. These forts overlook the Aurangā, and the bed of that river for some miles above and beyond the forts is studded with rocks, which, when it is in flood, look like jagged teeth. The name may thus perhaps mean the place of the fanged river.

Boundaries. The district is bounded on the north by the districts of Gayā and Shāhābād; on the east by Gayā, Hazāribāgh and Rānchī; on the south by Rānchī and the Tributary State of Sirguja; and on the west by the latter State and the district of Mirzāpur in the United Provinces.

Configuration. In shape, Palāmau roughly resembles a parallelogram, having a length of 119 miles from north-west to south-east and a breadth of 101 miles from west to east. It is essentially a hilly district, and in this respect it presents a striking contrast to the alluvial plains of Bihār on the north-east and the rolling uplands of the Chotā Nāgpur plateau on the south-east. Unlike Rānchī and Hazāribāgh, the country seems to contain but little tableland, the surface of the country being wilder and more broken up by rock and jungle than in either of those two districts; though, as a matter of fact, it consists of a series of terraces mounting gradually to the Rānchī plateau and the high Sirguja tableland Unlike Bihār, there are few level stretches of any size, except to the north along the bank of the Son, and, in a much lesser degree, in the valleys of the Koel, Amānat, and Bānka rivers, and also in the Chhechhāri valley to the extreme south. Nowhere in the district is it possible to get more than 6 or 7 miles from a well defined hill.

The country to the south is occupied by numerous spurs from the plateau of Chotā Nāgpur and the high tableland of Sirguja, which form a network of rocky hills covered with jungle and forest. The central tracts, though hilly, are far less rugged and contain a large proportion of cultivated land, while a narrow strip of land on the right bank of the Son in *pargana* Japlā is of alluvial origin and presents a level stretch of cultivation. Here the physical aspects of the country, the methods of cultivation and the character of the people differ in no material respect from those of the adjoining districts of Gayā.

The greater part of Palāmau consists, however, of hilly broken country, covered for the most part with low jungle and cut up in all directions by numerous streams and torrents, which dry up during the hot weather and come down in spate during the rains. Its average elevation is about 1,200 feet above sea-level, but some of the loftier peaks and plateaux in the south attain a height of over 3,000 feet. The valleys again vary in size from one

to nine hundred square miles, but are for the most part narrow; and except in the valleys of the Amānat and Koel rivers, there is nowhere any large expanse of tilth.

Natural divisions.

The district comprises four distinct tracts, which are roughly coterminous with the four *parganas* or fiscal divisions adopted for administrative purposes. By far the largest of these is *pargana* Palāmau, which forms the greater portion of the district and consists of jungle-clad hills and fertile but narrow valleys. *Pargana* Torī is an undulating but, in many places, highly cultivated tract with a few large isolated hills; until recently it formed part of the headquarters subdivision of Rānchī district, and its tenures, people and customs are quite distinct from those of Palāmau. *Pargana* Belaunjā in its southern portion closely resembles the Palāmau *pargana*, but towards the north it sinks into a narrow but extremely fertile valley, into which the Son yearly overspills. *Pargana* Japlā, in the extreme north of the district, is a tract almost devoid of hills and very similar to the alluvial portion of the district of Gayā.

Scenery.

The scenery of Palāmau is very varied, often beautiful and occasionally grand. There are no level plains, and the general appearance of the district is that of a confused mass of rocky hills, now springing up in isolated peaks and now stretching away in irregular ranges, mostly covered by a dense growth of jungle. The villages, which are usually small and scattered, lie ensconced in the hollows among the hills; and a traveller passing within even a quarter of a mile of a village might fail to discover its existence. From the summit of a ridge or hill, the country appears covered by a waving sheet of low forest, with all signs of human habitation concealed from view, except perhaps a glimpse here and there of a low red tiled roof, a distant grove of trees, or an occasional herd of cattle. The forest-clad hills, the bold scarps in the highlands, the rocky beds and rapids of the rivers, and the lofty ranges which bound the view to the south, all combine to produce most picturesque effects.

In the north and centre of the district the scenery is that of river valleys, varied, however, by the rugged outline of the hills. Few places could present scenes of placid beauty more attractive than some of the long reaches of the Koel, Amānat and Aurangā rivers, where they flow between high banks covered with grass near the water's edge and crowned by great forest trees above; while towards the close of the cold weather the hills are rich with the blaze of the scarlet flower of the *palās* tree and later with the bright yellow of the *galgal* or yellow cotton tree (*Cochlospermum Gossypium*). To the south the scenery is wilder and more

picturesque. "The jungle," remarks Mr. Forbes, "becomes forest, and the hills put on almost a grand appearance. The roads and paths wind about now over the top of a lofty eminence, which enables you to look down upon the valley below and over to the blue hills beyond. Then, again, you have to descend a steep *ghāt* with huge boulders scattered here and there, and some great tree lying fallen and decayed right across your path, and loose stones which seem to require but a slight push to send them rolling to the bottom. On reaching the bottom of the *ghāt*, the path will sometimes follow the bank of a brook or watercourse, which, emerging from the fastnesses and gorges among the hills, winds in and out till it joins the stream that waters the valley below. These brooks are generally dry very early in the cold weather, but in some of the southern *tappās* I have come across them so late as the month of March, regular little babbling streams filled with speckled trout glancing in and out among the stones, and the banks sometimes rocky, sometimes clothed with verdure, and always overhung with trees of all kinds and hues, and great creepers that hang down to the water's edge, the whole forming as charming a picture as one could wish to see."

Among other picturesque scenes may be mentioned the views from Chandwā to the south, those in *tappās* Simā and Durjāg, and those in Bāresānr towards the Chhechhāri valley; while along the Koel from its entrance into the district to its junction with the Aurangā—a distance of some 50 miles—there is an uninterrupted series of views, which for variety and grandeur can hardly be equalled. What wonder when, throughout this portion of its course, it is fringed by imposing hills and passes clad with virgin forest, the beauty of which reaches its highest natural perfection, when set off by animal life, in the shape, it may be, of a bison contentedly but suspiciously grazing on the luscious *khas* grass, an antlered stag taking its evening drink, or big peacocks trumpeting their noisy call, as they step forth at sundown for their daily parade.

HILL SYSTEM.

The hills in the south-west and south-east are remarkable for their irregularity of outline and system. The majority of the spurs and ranges bear no definite names, but the peaks are often distinguished by names derived from the names of villages in the neighbourhood or from some peculiarity in their appearance. The central portion contains short isolated ranges of low hills rising from the comparatively open country; and the extreme north is traversed by a long range rising in *tappā* Deogan, which runs due west across the Japlā *pargana* and continues right across to the extreme west of the district; in the centre it

is pierced by the Koel, which in some remote past must have cut its passage to the Son by erosion through this natural barrier.

The whole system consists of a series of peaks and ranges, the general trend of which is from east to west, a direction more or less parallel with that of the scarps of the adjoining plateaux; but, as in other hilly countries, there are a number of spurs and ridges and outlying peaks in every direction. Their contour depends mainly on the nature of the rocks of which they are composed, but every variety of form and outline is found. The most numerous are those composed of crystalline and metamorphic rocks, a class represented by a great number of hills and ranges with elevations up to and sometimes beyond 3,000 feet. The outlines presented by the hills in the northern half of the district are generally sharply angular, but elsewhere many of the ridges present an almost regular sky-line, which continues at a steady elevation for long distances. The second class consists of hills formed of sandstones or conglomerates, either Barākars or Mahādevas. The former are represented by long ranges east of the Koel, averaging 200 to 300 feet above the surrounding country, but occasionally having peaks which rise about 200 feet higher. The latter are found in groups consisting for the most part of flat-topped ridges, which also average from 200 to 300 feet above the level of the surrounding country. Their faces are scarped, and often eroded into grotesque shapes; and occasionally there are conical peaks rising to a great height, such as the Lātehār peak near the village of the same name, which is 910 feet high or 2,051 feet above the level of the sea; the Bijkā hill, which rises to a height of 1,300 feet above the village of that name or 2,479 feet above sea-level; and the Khairā hill in *pargana* Belaunjā, which has an altitude of nearly 1,700 feet and forms a landmark for a radius of 30 miles. The last class consists of the *pāts* or plateaux to the south, which are formed of crystalline rocks and have their summits capped with sandstone trap or laterite. The principal are Netarhāt Pāt (3,356 feet), Lamti Pāt (3,777 feet) and Galgal Pāt (3,823 feet).

The hills are highest in the south, and gradually decrease in size towards the north. In the extreme south-west they spring from the scarp of the great tableland of Sirguja immediately below the Jamirā Pāt, a high plateau rising to a height of nearly 4,000 feet; and here they enclose the picturesque Chhechhāri valley. This valley is a complete basin closed in by hills, with only one outlet to the north, through which a small stream carries the drainage of the highlands into the river Koel. On the south it

is overlooked by a lofty range of hills in *pargana* Barwe; on the west the Jamīrā Pāt rises like a great wall, confronted on the eastern side of the valley by the Netarhāt Pāt; while a lofty spur from the Jamīrā Pāt, crowned by the natural fortress of Tamolgarh, overhangs the valley to the north. The crest of the Netarhāt Pāt is an undulating tableland, about 4 miles long and 2½ miles broad, through the centre of which a small stream runs. The climate is cool throughout the year, the summit is free from clouds and mist, and but for its inaccessibility and feverishness, the place would seem to be well suited for a sanitarium.. The other most conspicuous peaks of Palāmau are Bulbul, on the south-east boundary, 3,329 feet; Burhi, on the south-west boundary, 3,078 feet; Kotām in the southern *tappā* of Simā, 2,791 feet; Kumāndi in the central *tappā* of Bāri, 2,530 feet; and Tungāri in the south-western *tappā* of Khāmhī, 2,108 feet.

RIVER SYSTEM. The general line of drainage is from south to north towards the Son, which forms part of the northern boundary, but a small area to the south-west is drained by the Kanhar. The principal rivers are the Koel and its tributaries, the Aurangā and Amānat; there are also a host of smaller streams, most of which are mere mountain torrents with rock-strewn beds. The same feature also distinguishes the Koel, Amānat and Aurangā, the upper reaches of which are characterized by high banks, generally rugged and occasionally precipitous, with a rapid stream dashing over boulder and shingle or gliding calmly, except in time of spate, in shallow reaches terminated by rocky barriers. On the north these rivers have deep sandy beds, into which the water sinks out of sight during the hot weather, percolating through the soft sand, until some outcrop of rock arrests its course and forces it to the surface.

The rapidity with which the country is drained by these rivers and streams may be gathered from the fact that the only river ever known to overflow its banks is the Son, and that only before its junction with the Koel. The latter is by far the most important of the rivers of Palāmau, for it drains the entire area of the district, with the exception of a tract in the west drained by the Kanhar; of small strips in *pargana* Belaunjā, which is drained by numerous rivulets flowing into the Son, and in *pargana* Japlā, which is drained by the Kararbār; of *tappā* Deogan, where the drainage sets north-east into Gayā; and of *pargana* Torī, the drainage of which sets to the east towards the Dāmodar river.

All the rivers of Palāmau are exceedingly dangerous in the rains, not only on account of the violence of the freshets which come

roaring down them, but also because of the extremely treacherous quicksands with which their beds are permeated.

The following is a brief description of the principal rivers.

The Son forms the northern boundary of the district for about 15 miles and separates it from Shāhābād. Flowing eastward from Mirzāpur, where its course lies along a deep valley never more than 8 or 9 miles broad, it first touches on this district at its north-west corner. Thence it flows due east between the steep slopes and precipices of the Kaimur hills and a northern range of hills in this district, till it is joined by the Koel; it then pursues a north-easterly direction, leaving the district nearly opposite Akbarpur in the Shāhābād district. Son.

During this portion of its course it attains a great breadth, amounting in places to 1 or 2 miles; and another peculiarity is the height of the eastern bank, where the strong westerly winds which prevail from January till the breaking of the rains in June heap up the sand from the river bed to a height of 12 or 14 feet above the level of the country, thus forming a natural embankment for many miles. But the most striking features of the river are its meagre stream of water at ordinary times as compared with the enormous breadth of the river bed, and its violence at periods of flood. Seen in the dry season, about April or May, the bed presents a wide stretch of drifting sand with an insignificant stream of water, barely 100 yards wide, meandering from bank to bank and fordable in most places. But in the rainy season, and especially after a storm has burst on the plateau of Central India, the river presents an extraordinary contrast. It drains a hill area of 21,300 square miles, the entire rainfall of which requires to find an outlet by this channel; and after heavy rain the river rises with incredible rapidity. These heavy floods are however of short duration, hardly ever lasting more than four days, after which the river rapidly sinks to its usual level.

Navigation is intermittent and of little commercial importance. In the rainy season large boats occasionally proceed for a short distance up-stream under favourable circumstances of wind and flood; but navigation is rendered dangerous by the extraordinary violence of the floods, and during the rest of the year it is impossible for any but boats of light draught owing to the small depth of water. The principal traffic is in bamboos which are floated down, bound into rafts consisting of 10,000 or more lashed together—a tedious process in the dry weather, as they are constantly grounding, and the many windings of the stream render their progress extremely slow. Below the junction of the Koel a species of small pebbles or agates is found,

many of which are ornamental and take a good polish; most of them consist of silica, both opaque and diaphanous, of a reddish or dark green tinge.

Kanhar. The Kanhar river forms part of the south-western boundary of Palāmau, dividing it for nearly 30 miles from the Tributary State of Sirguja. It rises below the western face of the Jamīrā Pāt, and after running for a short distance parallel with the Koel, turns to the north-west, flows into the district of Mirzāpur, and eventually mingles its waters with the Son. Its bed is rocky throughout its course, and it is practically a mountain torrent with a rapid and dangerous stream.

Koel. The Koel, or North Koel, as it is also called, rises in the Barwe hills in Rānchī, and enters this district near Rūd at its extreme south-east corner. After flowing nearly due west for about 24 miles, it curves round the long range that runs to the end of *tappā* Khāmhī, and turning north at an almost complete right angle, pursues a northerly course through the centre of the district, till it falls into the Son a few miles north-west of Haidarnagar, receiving on its way the waters of many rivulets and streams. Its principal tributaries are the Aurangā and Amānat, the former of which joins it from the south near Kechki about 10 miles south of Daltonganj, while the latter joins it from the east 5 miles north of the town.

The bed of the Koel is rocky up to a short distance beyond its confluence with the former river, but that of the united stream is mainly composed of sand; and between this point and the Son there is only one serious obstacle to navigation, consisting of a ridge of gneiss rock that traverses the river below the village of Sigsigi. But the sudden freshets in the Koel during the rains render navigation dangerous. It has been known to be almost dry in the morning, and three hours later, owing to heavy rain in the south, the water has been 10 feet deep, roaring down in huge waves that would swamp any native boat. From its source to its junction with the Son its length is about 160 miles, and since it drains a catchment area of at least 3,500 square miles, it naturally contributes a large supply of water to the Son during the rains; at other times the stream is not deep enough to enable cargo boats of even small dimensions to make their way between that river and Daltonganj.

In many places the reaches of this river contain scenes of great beauty, and sometimes even of grandeur, such as the rocky bed and rapids north of Hutar and the rapids near Parro to the south.

Aurangā. The Aurangā rises near Soheda in a pass leading down from the Chotā Nāgpur plateau, and pursues a winding course

in a north-westerly direction for a distance of about 50 miles, till it flows into the Koel near Kechki, 10 miles south of Daltonganj This river and its feeders water a large valley in the south-east, the southern face of which is formed by the Simā range of hills. At first a narrow stream, its bed widens rapidly, and by the time it reaches Palāmau, it attains a considerable size. Here the ruins of two large forts overlook it, and its channel is crowded with huge masses of gneiss. Owing to its rocky bed, navigation would be impossible in the rains, and at other times the supply of water is insufficient for even the smallest craft. Its principal tributaries are the Sukrī and Ghaghri.

Amānat. The Amānat takes its rise in the hilly *pargana* of Kundā in the Hazāribāgh district and flows almost due west till it joins the Koel, 5 miles north of Dattonganj. It flows through a rich well-cultivated valley and is the principal drainage channel of the east of the district. Its tributaries are, however, all small streams with the exception of the Jinjoi, Mailā and Piri.

Other rivers. Other streams draining important areas are the Sarabdahā, the Tahleh, the two Bānka rivers, which drain the eastern part of Belaunjā and Untāri, and the Kararbār, which flows into the Son below its junction with the Koel after draining *pargana* Japlā

GEOLOGY. The characteristic formation of Palāmau is gneiss, of which all the more important hill ranges are composed. It is of extremely varied constitution, and includes granitic gneisses, hornblende gneisses, calcareous gneisses, etc. In some parts, associated with the gneisses, there is an enormous thickness of crystalline limestone. Along the north-west boundary of the district is the eastern termination of a large outcrop of Bijawar slates, which extends westward for nearly 200 miles through Mirzāpur and Rewah. The Lower Vindhyans, which rest unconformably upon the Bijawars, are found along the valley of the Son, where representatives of the Garhbandh, porcellanic and Khinjua groups are found; that first mentioned contains two subdivisions, a lower one consisting of conglomerates, shales, limestones, sandstones and porcellanites, and an upper band of compact limestone of 200 or 300 feet in thickness. The rocks of the porcellanic group, which overlies the Garhbandh, are indurated highly siliceous volcanic ashes; their thickness increases as they approach the former centres of volcanic activity in the neighbourhood of Kutumbā, Nabīnagar, and Japlā. The shales and limestones of the Khinjua group are mostly concealed by alluvium along the banks of the Son. As the Vindhyans are unfossiliferous, their geological age cannot be exactly determined, but there is reason to think that they may be older than Cambrian.

The next formation, the Gondwāna, contains numerous fossil plants, which determine its age partly as upper palæozoic and partly as mesozoic. It is of great economic importance on account of the coal and iron ore which it contains. It comprises in Palāmau the Mahādeva, Pānchet, Rānīganj, Barākar and Tālcher divisions. The rocks of this formation generally weather into low undulating ground, but those of the Mahādeva group rise into lofty hills, and those of the Barākar group sometimes form low ranges of hills. The coal seams are restricted to the Barākar and Rānīganj groups, which consist of alternating layers of shale and sandstone; the workable seams are found chiefly in the Barākar. The Pānchet and Mahādeva groups consist principally of sandstones, and the Tālcher mostly of shales; the Tālchers, which are the oldest Gondwāna rocks, contain at or near their base an irregularly distributed conglomerate, consisting of large and small boulders embedded in clay, which is supposed to be of glacial origin. The Aurangā, Hutar, and Daltonganj coal-fields are situated entirely in Palāmau, which also contains the western extremity of the large Karanpurā field. The boundaries of the coal-fields are usually faults, whose position is indicated by lines of siliceous breccia, and hot sulphurous springs are frequent along them; among these springs may be mentioned that known as Tatahā near the village of Hithli Marwai in the Hutar coal-field. The best coal is that of the Daltonganj field, but the quality and quantity of the coal vary considerably throughout the field. In the Aurangā field, although there is a large amount of coaly matter, the quality is inferior. The iron ores which occur are hematite and limonite associated with shales of the coal measures of the Barākar group.

Near the southern edge of the district, the lofty flat-topped hills known as *pāts* are capped by great masses of laterite resulting from the decomposition of basaltic beds of the Deccan trap formation. The largest of these is the vast Netarhāt plateau west of the Koel river. A few intrusive dykes of the Deccan trap formation occur in the Daltonganj and Hutar coal-fields.

Along the Son, especially below its confluence with the Koel, the rocks are concealed by deep alluvium which merges into the alluvial formation of the Gangetic plain. Alluvial soil is scattered over many other parts of the district, and nearly everywhere contains in great abundance the calcareous concretions known as *kankar*.

Detailed descriptions of the geology of the district will be found in the **Memoirs of the Geological Survey of India.** The

Aurangā and Hutar coal-fields and the iron ores of Palāmau and Torī have been described by V. Ball in vol. xv, part i; the Daltonganj coal-field by Th. Hughes in vol. viii, part ii; the Karanpurā coal-field by Th. Hughes in vol. vii, part iii; the Lower Vindhyans generally by F. Mallet in vol. vii, part i; and the volcanic rocks of that series by E. Vredenburg in vol. xxxi, part i. An account of a boring exploration in the Daltonganj coal-field by Mr. T. D. LaTouche will be found in Records, Geological Survey of India, vol. xxiv, part iii.*

The vegetation of Palāmau is very varied in character. In the alluvial tract to the north, where the land is largely under rice cultivation, the fields abound in marsh and water plants. In the wooded hills and valleys which make up the rest of the district a different class of flora is met with. The surface is occasionally bare and rocky, but the hills are generally clothed with a thick and luxuriant jungle, in which the close-set bamboo known as Dendrocalamus strictus is often prominent. The steeper slopes again are covered with a dense forest mixed with many climbers; the trees are rarely large, but many of them are economically useful, yielding timber, fruit, oil, etc. *Sāl* (Shorea robusta) is gregarious, and among other noteworthy species are species of Buchanania, Semecarpus, Terminalia, Cedrela, Cassia, Butea, Bauhinia, Acacia and Adina, which these forests share with similar forests on the lower Himālayan slopes. Mixed with these, however, are a number of trees and shrubs characteristic of Central India, such as Cochlospermum, Soymida, Boswellia, Hardwickia and Bassia, which do not cross the Gangetic plain. One of the features of the flowering trees is the wealth of scarlet blossom in the hot weather produced by the abundance of *Butea frondosa* and *Butea superba*. A more detailed description of the forest trees and jungle products will be found in Chapter VI. BOTANY.

The animals of the district may be divided into two classes, the carnivora and the non-flesh-eating animals. The former comprise tiger, leopard, bear, hyæna, wild dog, and, among the smaller species, jackal and wild cat. The latter are represented by *gaur* or bison, *sāmbar*, spotted deer, *nīlgai*, barking deer, Indian gazelle, four-horned antelope, wild pig, the black-face monkey (*langur*), the common red-face monkey, Indian fox, *ratel* (an animal of the badger tribe), Indian otter, mouse-deer, porcupine, hare and other smaller animals. FAUNA.

* I am indebted to Mr. Holland, Director, Geological Survey of India, for assistance in preparing the above account of the Geology of Palāmau.

being abruptly demarcated along its side. Indian otter (Lutra nair) are found in the Koel, towards the south near Kechki, and in the reaches of several other rivers. Porcupine (Hystrix cristata) are common in the south and elsewhere in the rocky hills, but their numbers are kept down, as they are much sought after by the aboriginal tribes, such as the Parhaiyās, Birjias and Orāons, for food. Hares (Lepus ruficaudatus) are common everywhere; they do much damage at night to the peasants' crops, and are largely trapped all over the district; they are eaten freely even by high class Hindus.

Game birds.

The game birds of Palāmau consist of jungle, spur and peafowl, black and grey partridge, rain, button and bush quail, and sand grouse. The lesser florican is sometimes met with, but is rare; green and blue rock pigeon and the common snipe are fairly common. Geese are rare, only occasionally visiting the district, and then in small numbers. Duck and teal are also comparatively rare; they usually stay in the Koel and the *bāndhs* or irrigation reservoirs near villages, and are more common in the north than in the southern tracts.

Fish.

Mahseer are found in the Son during the rains and also pass up the Koel; the latter river also contains Indian trout (Borilius bola). Among other fish met with at this season of the year may be mentioned *rahu* and *kājar*, but at other seasons only small varieties are found in tanks and streams, the most common among them being the *tengrā*, *barār*, *chipuā*, *jhingā*, *naktā*, *ledhā*, etc.

The *gariāl* or Gavialis gangeticus, sometimes also called the fish-eating crocodile, is said to have been found in the Koel as far up as Daltonganj during the rains. The snub-nosed alligator or mugger is common in the Son, but elsewhere is rarely met with; it is found in tanks in some localities, especially in the Forbes tank in Shāhpur opposite Daltonganj, where it is said that they have been known to carry off cattle and ponies that came to drink alone.

CLIMATE.

The climate is, on the whole, dry and bracing. The cold weather, which sets in towards the close of October and lasts till the beginning of March, is described as ideal. There is a keen bracing sharpness in the air, the sky is bright and cloudless, and there is no rain, except for showers about Christmas time and in January. In the south on the higher plateau there are sharp frosts during December and January. "I have seen," writes Mr. Sunder, "large trees and fields of *kurthī* (Dolichos biflorus) and

* The above account of the Fauna of the district has been compiled mainly from a note kindly supplied by the Deputy Commissioner, Mr. S. R. Hignell, I.C.S

rahar (Cajanus indicus) in the southern *tappās* of Palāmau, especially at Simā and Bāresānr, completely scorched by frosts, as if they had been passed through a furnace. And the weather is so cold here during December and January, that water kept in a basin at night in the open may be found in the morning frozen to an inch in thickness. Night after night the fly of my tent has been laden with hoar-frost, and often in the morning the ground all around has been a beautiful sheet of whiteness which has disappeared only after the sun had risen for about two hours." Hoar-frost has, indeed, been known to form night after night for a fortnight on end, lying on the ground till 10 or 11 A.M. Hail-storms are very common in February and the beginning of March, when they do great damage to the *rabi* crops.

In March the hot weather is ushered in by a high wind known locally as *lahar*. Generally proceeding from the west, it lasts from about 10 A.M. to 3 P.M., and as the year goes on, it gets more and more dust-laden till the end of May, degenerating at times into regular yellow dust-storms and whirlwinds called *lindoā*. During the months of April, May and June the heat is intense during the day, often reaching a temperature of 112° and 114° and sometimes of 116°; and the nights are oppressive, except for 2 or 3 hours before sunrise, when there is usually a sharp fall in the temperature. But though the heat is so great, it is exceedingly dry, and is alleviated by the strong breezes blowing. The rains usually break in June and last till about the middle of September, and at this period of the year the climate is unusually pleasant and cool.

Temperature and humidity. Generally speaking, Palāmau enjoys a moderate temperature throughout the year, except during the hot-weather months of April, May and June, when the westerly winds blowing from Central India cause high temperature, combined, however, with very low humidity. The range of temperature between the maximum and minimum in 24 hours is very great, frequently exceeding 30 degrees. The mean temperature increases from 74° in March to 86° and 94° in April and May, the mean maximum from 88° in March to 107° in May, and the mean minimum temperature from 59° in March to 81° in June. During these months humidity is lower in Chotā Nāgpur than in other parts of Bengal, and in this district it falls to 57 per cent. of saturation in March, to 46 per cent. in April, and to 51 per cent. in May. The usual marked change takes place with the commencement of south-west monsoon conditions in the second half of June, but the quick fall of temperature which takes place at the beginning of the monsoon is chiefly in day temperatures. Mean

maximum temperature falls from 107° in May to 99° in June and 90° in July, whereas no fall of minimum temperature takes place until July, and then it amounts to only 3°, viz., from 81° to 78°. During the cold weather months the mean temperature falls to 61° and the minimum temperature to 47°. The mean temperature for the year is 77°.

Rainfall. Only a fraction of an inch of rain falls monthly between November and April, and the rainfall then increases to nearly 1 inch in May, owing to the influence of occasional cyclonic storms in that month. In June the average rainfall for the whole district is 6·8 inches, and in July the heaviest fall of 13·8 inches occurs. August and September are also rainy months, with 13·4 and 7·6 inches, respectively; but in October the weather is generally fine with brief periods of clouds and rain, this being a period when cyclonic disturbances affect the west of the Province; the average fall in this month is only 2·7 inches. The average rainfall for the year is 48·16 inches.

The following table shows the rainfall recorded at the 4 oldest rain-registering stations during the cold weather (November to February), the hot weather (March to May), and the rainy season (June to October), the figures shewn being the averages recorded in each case. There are also rain-registering stations, more recently established, at Bhāonāthpur, Chattarpur, Gāru, Kerh, Lātehār, Lesliegani, Mahuādānr, Manātu, Nagar Untāri, Pānki and Pātan :—

STATION.	Years recorded.	November to February.	March to May.	June to October.	Annual average.
DALTONGANJ ...	30-31	1·92	1·94	40·68	44·54
BALUMATH ...	14-16	2·19	1·77	48·46	52·42
GARHWA ...	15-16	2·21	1·53	42·85	46·59
HUSAINABAD ...	15-16	2·00	1·43	45·65	49·08
AVERAGE ...	...	2·08	1·67	44 41	48·16

CHAPTER II.

HISTORY.

No record exists of the early history of Palāmau, but it plays a prominent part in the traditions of three aboriginal races, the Kharwārs, Orāons and Cheros. The legendary history of the Kharwārs states that in olden days they were the rulers of Rohtāsgarh, the great fort in the south of Shāhābād built on the plateau overlooking the Son, and that they migrated thence to Palāmau. Epigraphic research seems to show that this claim is not without foundation. An inscription at Rohtāsgarh refers to a chieftain named Pratāpadhavala who belonged to the Khayaravālavansa, and Professor Kielhorn has pointed out that this name appears to survive in that of the tribe of Kharwārs.* Other inscriptions of this chief have been found in Shāhābād, which shew that he was the ruler of at least the northern part of Palāmau and also held considerable power on the west of the Son. At Phulwāri a rock-cut inscription dating back to 1169 A.D. mentions him as having constructed a road up the plateau and gives him the title of Nāyaka or chief of Jāpila, which is evidently the modern Japlā in the north of this district. Another inscription of this chief is found engraved on the Tārāchandī rock near Sasarām; and a third, dated 1158 A.D., at the sacred Tutrāhi falls, 5 miles west of Tilothu on the western bank of the Son, which says that he made a pilgrimage there, accompanied by his whole household, 5 female slaves, his treasurer, his door-keeper, and the Court pandit. The only other record of this dynasty is found in an inscription at Rohtāsgarh, which records the excavation of a well in the fort by a descendant and successor of Pratāpadhavala, called like him Pratāpa. These records, scanty as they are, serve to show that as early as the 12th century A.D. the north of Palāmau was ruled by a powerful line of chiefs, who also held the great fort of Rohtasgarh and exercised dominion over the south of Shāhābād.†

EARLY HISTORY.

The legends of the Orāons also point to Rohtāsgarh as a former stronghold of their race. According to the traditions preserved from father to son, their original home was in the

* *Epigraphia Indica*, Vol. IV, p. 311, Note 10.

† Report, Archæological Survey of India, 1902-03.

Carnatic, whence they went up the Narbadā river and eventually settled in Bihār on the banks of the Son. Here they built a fort at Rohtāsgarh (Ruidas , but this was wrested from them by their enemies, who surprised them at night during one of their great festivals, when the men had fallen senseless from intoxication and only the women were left to fight. Some, however, managed to escape, and as they were pursued, divided into two parties. One party directed their course towards the Rājmahāl Hills, where their descendants now form the tribe known as Māle ; the others fled to Palāmau and turning eastward along the Koel took possession of the north-western portion of the Chotā Nāgpur plateau.* The legend current in Rānchī is somewhat different. There the Orāons say that one man only escaped from the Turkur or Muhammadans, and came upon some Horos (Mundāris), who had killed and were eating a cow. When he begged them to save him, they advised him to divest himself of his *janeo* or sacred thread, which the Orāons then wore, and join in the feast. This he did, and his pursuers, coming up, believed the Mundāris, when they said that the Orāon fugitive was not among them, as all were eating beef and none wore the sacred thread.

The Cheros likewise assert that they migrated to Palāmau from Shāhābād, where they claim to have been once the ruling race,—a claim confirmed by popular tradition, which ascribes to the Cheros many of the ancient buildings and fortifications in the south of that district. They held, they declare, the Rohtāsgarh plateau till they sallied forth to the conquest of Palāmau and drove out the Raksel Rājputs who were then its rulers. There is, at least, no doubt that as late as the first half of the 16th century they were a powerful tribe in the south of Bihār, a race of border robbers, who were chiefly known by the daring raids which they made into the open country at the foot of the hills. In the *Tārikh-i-Sher Shāhi* we find mention of a chief, Mahārta Chero, against whom Sher Shāh sent one of his generals, Khawās Khān, with orders to cut down his jungle fastness and utterly destroy him (1538). The power of this chief appears to have been considerable ; it is said in the *Makhzan-i-Afghānī* that he used to descend from his hills and jungles and harass the tenants round Bihār, and that he entirely closed the road to Gaur and Bengal ; great importance was attached to his final defeat by Khawās Khān ; and his destruction is mentioned in the *Wākiāt-i-Mushtāki* as one of the three great works accomplished by Sher Shāh.†

* The Revd. P. Dehon, S.J., *Religion and Customs of the Urāons* Memoirs, Asiatic Society of Bengal, vol. I, No. 9, 1906.

† Sir H. Elliot, *History of India*, vol. IV, 1873.

The legends of the conquest of Palāmau by the Cheros differ considerably. According to one account quoted by Colonel Dalton—"The Cheros invaded Palāmau from Rohtās; and with the aid of Rājput chiefs, the ancestors of the Thākurais of Rankā and Chainpur, drove out and supplanted a Rājput Rājā of the Raksel family, who retreated into Sirguja and established himself there. It is said that the Palāmau population then consisted of Kharwārs, Gonds, Mārs, Korwās, Parhaiyās, and Kisāns. Of these, the Kharwārs were the people of most consideration; the Cheros conciliated them, and allowed them to remain in peaceful possession of the hill tracts bordering on Sirguja. All the Cheros of note who assisted in the expedition obtained military-service grants of land, which they still retain. It is popularly asserted that at the commencement of the Chero rule in Palāmau, they numbered 12,000 families, and the Kharwārs 18,000; and if an individual of one or the other is asked to what tribe he belongs, he will say, not that he is a Chero or a Kharwār, but that he belongs to the 12,000 or to the 18,000, as the case may be." * THE CHERO CON-QUEST.

Another tradition states that the Kharwārs were not among the conquered people of Palāmau, but formed part of the invading army; and that the two tribes are distinguished by the name of Athārahazār and Bārahazār, because the Kharwārs of this force numbered 18,000 and the Cheros 12,000. On this point, at least, tradition agrees, that the rulers of Palāmau at the time of the Chero conquest were Raksel Rājputs, and that the Mārs or Māls were early settlers in the land. To this day numerous forts, such as that of Tamolgarh in the Chhechhāri valley, of Tarhasi near the Amānat river, and of Kot, are attributed to the former, while local tradition says that the old town of Palāmau, the important trading mart of Garhwā, and the villages of Dandā, Lakhnā, and Marhatiā were built by the Māls. Popular belief has it that they were a very wealthy race, and that parties of them return occasionally to the sites of their ancient settlements, seeking treasure which their ancestors buried in the hurry of flight. The Māls have nearly disappeared from the district, but are still found in the adjoining State of Sirguja, where they assert that their descendants were driven out of Palāmau by force of arms.

The legend generally accepted in the district, and implicitly believed in, is far more detailed. The Cheros, it is said, formerly lived in the sub-Himālayan tract called the Morang, but migrated to Kumāon, and thence made their way south to Bhojpur, *i.e.*, Shāhābād, where they reigned for 7 generations. The fifth ruler of the line, Sahābal Rai, invaded Champāran

* Col. E. T. Dalton, *Descriptive Ethnology of Bengal*, 1872.

with a large army of Cheros and ravaged the country as far as the Tarai, but after returning to his fort at Chainpur in the south of Shāhābād, was defeated and taken prisoner by a force despatched by Jahāngīr; he was then sent to Delhi, where he died fighting a tiger single-handed for the amusement of the emperor. His son, Bhagwat Rai, continued the predatory raids which had led to his father's downfall, and when the imperial forces marched against him, took refuge with a Rājput chief, Deo Sāhi, who held the fort of Dhaundānr, a village near Sasarām. Thence he went to Palāmau with Deo Sāhi's son, Pūran Mal, and a small following, and took service under Mān Singh, the Raksel chief of the country. In 1613, when Mān Singh had gone to Sirguja, Bhagwat Rai treacherously murdered his family and made himself master of the country, appointing Pūran Mal as his Dīwān or Prime Minister (1613).

THE CHERO RULE.

Bhagwat Rai was the first of a long line of Chero chiefs who reigned in Palāmau for nearly 200 years. The most famous ruler of the dynasty was Medni Rai, surnamed the Just, who, it is said, extended his sway far beyond the tract of country now included in Palāmau. He made himself lord paramount of the southern portion of Gayā and of large portions of Hazāribāgh and Sirguja, and undertook an expedition against the Mahārājā of Chotā Nāgpur, in which he penetrated as far as Doisā, sacked it and built with the plunder thus obtained the old fort of Palāmau. His son, Pratāp Rai, is said to have built the other fort at the same place, though the building was never completed. It remains as it was left by the workmen, with large heaps of stone piled up in the courtyard, some cut, others just as they came from the quarry – a fitting monument of the fall of the great power raised up by Medni Rai, which after his death was undermined by quarrels and dissensions among his family.

Invasion of Shaista Khān.

With the reign of Pratāp Rai we enter upon safer ground, for instead of shadowy traditions we find authentic accounts of three invasions in the chronicles of Muhammadan historians.* The first of these invasions took place in 1641-42 in the reign of Pratāp Rai, when Shaista Khān, the Governor of Bihār, defeated the Cheros in several engagements. According to the Pādishāhnāmah, the short-sighted rulers of Palāmau trusted to their mountain fastnesses, and showed no signs of obedience to the imperial governor. Pratāp, whose family, generation after generation, had ruled over the country, an infidel like all his ancestors, neglected to send the customary tribute and defied Shaista

* H. Blochmann, *Notes from the Muhammadan Historians on Chutia Nagpur, Pachet and Palāmau*, J. A. S. B., vol. XL, Part I, 1871.

Khān, who reported his contumacy to Shāh Jahān. The Emperor thereupon ordered Shaista Khān to drive him out and " clear the country of the filth of his unprofitable existence." In October 1641 Shaista Khān marched from Patna at the head of an army of 5,000 horse and 15,000 foot, and entered the territory of the Cheros through the Manātu pass. The account of the preparations made shew the difficult nature of the country he had to traverse and the slow advance made. " Wherever he pitched his camp, he had trenches dug, the earth of which was formed into a wall surrounding the whole of the encampment, and matchlock-men were placed as guards in the trenches to frustrate night-attacks. A large party was employed to cut down the jungle and make a road wide enough for the army to advance. All settlements on both sides of the road were plundered and destroyed. The wretched enemies withdrew on every occasion to the jungles and the hills, and trembled like victims in the hands of the butcher. The swords of the soldiers, swords of pure water, delivered many unto the fire of hell; others escaped half dead with fright. Of our troops also some were wounded, and a few fell martyrs in this holy war."

By the end of January 1642 the army had penetrated as far as Arā, and an advance was then ordered on the fort of Palāmau. After a short but successful engagement, the Muhammadan troops pressed on to the fort, which was surrounded on all sides by impenetrable forest, and here the advance guard was attacked by the Cheros when clearing the jungle for their encampment. " Shaista, on hearing of the engagement, sent at once a detachment to their assistance, and, together with Zabardast Khān, took up a position on the banks of a river which flows below Fort Palāmau. The enemy, covered by the houses outside the fort, fired upon him, and as a number of our troops suffered martyrdom, the men dismounted and occupied the summit of a hill which commands the fort. The firing lasted till evening, and large numbers were killed and wounded." After this battle, Pratāp Rai submitted and promised to pay a tribute of Rs. 80,000; and when this sum had been handed over, Shaista Khān left Palāmau (February 12th, 1642).*

Invasion of Zabardast Khān

Internal faction now set in, a conspiracy against Pratāp Rai being set on foot by two of his uncles, Tej Rai and Daryā Rai, who induced Itikād Khān, the successor of Shaista Khān, to consent to his deposition, on condition that he was sent to Patna as a prisoner. Tej Rai then proceeded to imprison Pratāp and usurped

* H. Blochmann, *Notes from the Muhammadan Historians on Chutia Nagpur, Pachet and Palāmau*, J. A. S. B., vol. XL, Part I, 1871.

the throne, but he failed to keep his promise and deliver up the fallen chief to the Governor of Bihār. The latter, accordingly, lent a ready ear to the suggestion of a fresh band of conspirators, headed by Daryā Rai and other chiefs disappointed with the new regime, that they should hand over the fort of Deogan if he supported them with an army against Tej Rai. This undertaking was faithfully carried out, the fort being surrendered to a Muhammadan force in October 1643. Their commander, Zabardast Khān, at once proceeded to prepare the way for a forward movement by cutting down the jungle and widening the road to Palāmau, and Tej Rai sent up an army of 600 horse and 7,000 foot to oppose his advance. This force was defeated in an engagement a few miles from Deogan, and shortly after this Pratāp was set at liberty by some of his adherents and put in possession of the fort of Palāmau. Tej Rai fled, and Zabardast Khān then marched on Palāmau, passing, it is said, through dense jungles and forcing several difficult passes. When he was within 6 miles of Palāmau, Pratāp, seeing the hopelessness of resistance, opened negotiations, which ended in his going with Zabardast Khān to Patna. There he agreed to pay an annual tribute of a lakh of rupees; and on the recommendation of Itikād Khān, Shāh Jahān made him a commander of 1,000 horses and gave Palāmau to him as a military fief, its *jamā* being fixed at 2½ lakhs.*

MUHAMMADAN CONQUEST.

Up to this time the Muhammadans had succeeded, in spite of two invasions, in obtaining nothing but promises from the chiefs of Palāmau, who continued the same policy for twenty years longer. Every year the Muhammadans demanded their tribute; every year the Palāmau chiefs neglected to pay it and continued their cattle-lifting raids along the frontier. At last, Dāūd Khān, the Governor of Bihār, determined to teach a sharp lesson to these "heathenish zamīndārs" and to completely subjugate their country. Of this invasion there is a long account in the Alamgīrnāmah, from which we learn that the territory acknowledging the rule of the Cheros extended for some distance into the south of the Gayā district: indeed, the northern frontier of Palāmau is said to have been only 50 miles from Patna. Palāmau, the seat of the Chero chief, it says, was something of a city, tolerably well populated and protected by two strong forts, one on the summit of a neighbouring hill, the other on the plain; the Aurangā river flowed close by, and all round were high hills and dense jungle. On the frontier were three great forts, viz., Kothī, Kundā and Deogan, and it was against these that Dāūd Khān first proceeded to march.

* H. Blochmann, *Notes from the Muhammadan Historians on Chutia Nagpur, Pachet and Palāmau*, J. A. S. B., vol. XL, Part I, 1871.

Leaving Patna with a strong force on the 3rd April 1660, he reached Kothī, 6 miles south of Imāmganj in the south of the Gayā district, on the 5th May, only to find that the enemy had abandoned it. He then moved on to Kundā, a strong hill fort 14 miles south-south-east, but this short distance took his army just a month to traverse. The whole country was covered with dense forest, and Dāūd Khān, who was determined to advance methodically, securing a safe line of communication, set his army to clear the jungle and make a road. On the 3rd June he reached Kundā and found that this fort also had been evacuated. He razed the fort to the ground, and then, as further advance was prevented by the approach of the rains, cantoned his army, fortified encampments being built at short distances between Kothī and Kundā, in each of which he placed a garrison. On the 25th October, at the end of the rains, the army, 6,400 strong, resumed its march, but progress was very slow owing to the cautious tactics of Dāūd Khān. A large body of pioneers was sent ahead to fell the forest and make a road; outposts were established along the line of march; and every evening entrenchments were thrown up round the camp to prevent surprise attacks at night. In nine days the army had only advanced 20 miles, reaching Loharsi near the Amānat river on the 3rd November. Here some time was spent in fruitless negotiations, but on the 9th December Dāūd Khān had penetrated within 2 miles of Palāmau; and the Cheros, advancing from the fort, threw up entrenchments and prepared to make a final stand.

Dāūd Khān then offered the Chero chief the final terms dictated by the Emperor, viz., that he should submit, embrace Islām, and hold his State as a tributary chief. On the 17th December, before a reply was received, one of Dāūd Khān's captains, unable, it is said, to suppress the eagerness of the soldiers, attacked the enemy's outworks; and Dāūd Khān, hearing of the engagement, pushed forward with the rest of his force, threw up entrenchments within the enemy's fire, and commenced a bombardment, which lasted till sunset, and put an end to the fighting. During the night the Cheros brought two large cannon from the fort, and mounting them on their bastions and curtain-works, completely dominated Dāūd Khān's trenches, which were on a lower level. The Muhammadans were equal to the emergency, carried a hill overlooking the enemy's position, and dragging guns up it, enfiladed the enemy and quickly silenced their fire.

The fighting had now lasted 3 days, and the Cheros, unable to hold their position, retreated to the banks of the river, and proceeded to erect breastworks along the line of hills running

parallel to it, and to barricade the passes. Dāūd Khān, following the same plan of clearing the country as he advanced, spent 2 or 3 days in felling the forest which intervened between him and the enemy, and then ordered a general advance. After a stubborn fight of 6 hours' duration, "the breeze of victory blew on the cows' tails fixed on the standards of Islām"; and the enemy fled into the fort. Their final stand is graphically described in the Alamgīrnāmah. "It had been Dāūd's original plan to occupy the trenches dug by the enemy, and commence a siege; but the soldiers could not check their fury, and rushing to the river, they crossed it, and attacked the fortifications which surround the town at the foot of the fort. The enemy withdrew to the higher fort, where the Rājā, who had sent his whole family and valuables away to the jungles, continued the defence. The imperialists, in the meantime, had taken the lower fortifications, and stood before the gate of the upper fort, where the fight raged till the first watch of the evening. Half a watch later, the Rājā fled to the jungles, when the whole fort was occupied by the victorious army. The town was cleared of the filth of the existence of the infidels, their idol temples were destroyed, and the prayer of Islām filled the place."

The capture of the forts of Palāmau practically ended the struggle. Though the Cheros succeeded in carrying the fort of Deogan, they were quickly expelled by a force detached by Dāūd Khān, and the Muhammadan conquest was complete. Dāūd Khān remained for some time, fortifying several strongholds and arranging for the administration of the country, and then returned to Patna, leaving Palāmau in charge of a Muhammadan Faujdār. The latter was removed in 1666, and Palāmau was then placed under the direct control of the viceroy of Bihār.*

MUHAMMADAN RULE.

From this time the annals of Palāmau are blank for nearly half a century. The Muhammadans treated the country as a fief and did not interfere so long as the tribute was regularly paid. To the south the Chero chiefs retained their independence, but the north was controlled by Hindu or Muhammadan nobles. Here the chief family in the beginning of the 18th century consisted of the Rājās of Sonpurā, who were recognized by the Muhammadan Government as the zamīndārs of *parganas* Japlā and Belaunjā; but they were dispossessed, presumably for some act of disloyalty, and the two *parganas* granted by the Emperor Muhammad Shāh to the family of Ghulām Husain Khān, the author of the Sair-ul-Mutākharin. The Rājā of Sonpurā did

* H. Blochmann, *Notes from the Muhammadan Historians on Chutia Nagpur, Pachet and Palāmau*, J. A. S. B., vol. XL, Part I, 1871.

not submit quietly to this summary ejectment, but fought every inch of ground; and it was only after a long and protracted struggle that the Nawābs succeeded in gaining possession of part of the territory granted to them. Here, however, they held considerable power. Nawāb Hedayat Alī Khān, the father of the author of the Sair-ul-Mutākharin, was at one time Deputy Governor of Bihār, and, his son says, "bore an unbounded sway. He was Governor of all that extensive tract of ground which stretches as far as Chotā Nāgpur; and he commanded also over Siris and Kutumbā, two districts that had been leased out to our family from a great number of years."

In the Sair-ul-Mutākharin we find a reference to an expedition which the Nawāb undertook about 1740 to subdue the chieftains of the hilly country. "As he sought to raise his character and to acquire a renown, the Rājā of Rāmgarh became, of course, the object of his attention. This Rājā was the most powerful Gentoo zamīndār of the hills, and so considerable and warlike, that the Viceroys of the Province had hardly any control over him. He was joined in that design by Rājā Sundar Singh, and by Rājā Jai Kishun Rai, both zamīndārs of the Palāmau country, as well as by some other zamīndārs of Siris, Kutumbā and Sherghāti. Supported by such a confederacy, he laid siege to the fortress of Rāmgarh, and at last took it. After which, he advanced some journeys more into the hilly country, and after having settled it, he was taking some rest from the fatigues of that expedition, when on a sudden intelligence was brought by some trusty persons that Raghujī Bhonsla Pandit had sent his own Pradhān at the head of 40,000 horse to conquer Bengal, and that in a few days they would pass close to him through the hills on their way to that country. He held consultations with his friends, as the forces he had with him were by no means equal to the task of barring the passage to such invaders. They all advised him to quit the hilly country, and he accordingly descended and encamped at the foot of that chain. In a few days the Marāthas rushed through it, and turning towards Pachet and Mayūrbhanj, they fell upon the Midnapore country."*

Palāmau, however, seems to have escaped the ravages of war at this period, though the Nawāb raised troops to support the Emperor Shāh Alam in his invasion of Bihār (1759–61). He founded the town of Husainābād, and for many years lived there quietly, until, says his son, "he was pleased to depart to the merciful mansions of the Omnipotent King and was inhumed in the

* Raymond's translation of the Sair-ul-Mutākharin, reprinted at Calcutta, 1902.

town which he had founded." On his death, Ghulām Husain Khān at once went to Murshidābād and there had the patent of the family *jāgīr* confirmed in his own name (1765).*

BRITISH CONQUEST. Shortly after this, the feuds of the Cheros led to the intervention of the British. For a long time the country had been in a state of disturbance owing to the struggles between rival factions for the chiefdom. In 1722 a rebellion broke out in which the ruling chief Ranjit Rai was murdered, and his place taken by Jai Kishun Rai, the head of the Bābuān, as the members of the younger branches of the ruling Chero family were called. A few years afterwards, Jai Kishun was shot in a skirmish with some of Ranjit Rai's relatives in the Chetmā pass near Satbarwā, and Chitrajit Rai was made Rājā. Jai Kishun's family fled to Maigra in the Gayā district, and took refuge with one Udwant Rām, a *kānungo*, who, in 1770, took Gopāl Rai, grandson of the murdered Rājā, to Patna, and presented him to Captain Camac, the Government Agent, as the rightful heir to the Palāmau Rāj.

Captain Camac promised the assistance of the British Government; and it happened that about the same time Jiunāth Singh, Dīwān under Chitrajit Rai, had declared before Mr. Bellam at Aurangābād that the Rājā of Palāmau would neither become a vassal of the British, nor grant supplies to any British troops that might pass through the country. This declaration, reaching Mr. Camac's ears, considerably hastened matters, for the Government, incensed at the attitude assumed by the Rājā, and learning that he and his Dīwān were committing great oppressions on the people in collecting supplies for their troops, sent a considerable force into Palāmau for the avowed purpose of reinstating Gopāl Rai. Jiunāth Singh, at the head of the Palāmau forces, attempted to defend the passes over which the British troops had to pass, but finding himself unable to do so, fell back as they approached; and shortly afterwards the British forces appeared before the Palāmau forts.

Here an obstinate resistance is said to have been offered, but being hard pressed, the Rājā's troops, probably a mere rabble, ill-armed, and without discipline, took refuge inside the forts, which were at once besieged by the British. As soon as the necessary preparations had been made, the British artillery opened upon the forts, but could make no impression upon the solid stone walls. There was, however, a certain spot in one of the walls of the old

* It is reported that two Muhammadan gentlemen of Husainābād are descendants of the Nawāb's daughter.

fort, which, though apparently built of as solid material as the remainder, consisted merely of an outward facing of stone, the interior being composed of mud. It had been thus constructed by Medni Rai as a weak point on which to make an attack, in order to enable the ruling family to retake the fort, should they at any time be driven out of it. This weak point was known to few persons, but Udwant Rām, now in the British camp, was among the number, and he pointed it out to his allies. The guns were soon directed to the spot and a breach effected, through which the attacking party entered and captured the fort. Chitrajit Rai fled to Rāmgarh, and his Dīwān and the Thākurais who supported him to Sirguja. Palāmau was then formally taken possession of as a British province, Gopāl Rai was installed as chief, and Udwant Rām received a *sanad* from Mr. Camac, appointing him the *kānungo* of the *pargana* (1772).

Though the British had assumed the government of the country, it was not till many years later that anything like settled order and an organized administration could be introduced. No sooner had Captain Camac left than the sons of the late Dīwān returned from Sirguja, and succeeding in getting themselves reinstated, set to work to avenge themselves upon Udwant Rām. Gopāl Rai, lending himself to their intrigues, summoned the latter to Shāhpur, a village on the banks of the Koel, where Gopāl Rai had built himself a new palace—now a picturesque ruin, opposite the station of Daltonganj - and had him barbarously murdered. The relatives of the murdered man applied for help to a small detachment of British troops which was quartered at Lesliegan j. The detachment marched to Shāhpur, and Gopāl Rai being taken prisoner was sent to Chatrā for trial and sentenced to imprisonment at Patna, where he died in 1784. His successor, Basant Rai, also dying in the same year, his brother Churāman Rai, a minor, was raised to his place. On coming of age he proved himself entirely unable to manage his estate, and in 1800 a general insurrection of the Cheros broke out. On the approach of Colonel Jones with a detachment, the insurgents fled into Sirguja, and receiving support there, so infested Palāmau, that in 1801 it became necessary to march two battalions into Sirguja in order to enforce adequate reparation for their outrages.

EARLY ENGLISH ADMINISTRATION.

After this, the extravagance and incapacity of Churāman Rai gradually reduced him to a state of bankruptcy, and brought the administration into disorder. Of this state of things there is a detailed account in Hamilton's Description of Hindostan (1820), which says—"In 1814, arrears having accumulated to the amount of Rs. 55,700, owing to the incapacity of the Rājā,

Churāman Rai, and the refractory conduct of the disaffected *jāgīrdārs*, the *pargana* was brought to the hammer, and purchased by Government for Rs. 51,000. The general regulations for the public dues and administration of justice had before extended to this estate, in common with the other places dependent on the Bengal Presidency; but in consequence of the wild state of the country, consisting chiefly of hills and forests, and the rude manners of its inhabitants, these regulations could not be said to have more than a nominal operation in the interior. In fact, the realization of the revenue partook more of the nature of voluntary contributions, than of that active and punctual enforcement of the rights of Government which was practised in all the other old districts, and from which the landholders of Palāmau had no peculiar claims to exemption. Besides these reasons, being a frontier station, it became of importance to vest the possession of the *pargana* in a person possessed of sufficient firmness to coerce the *jāgīrdārs*, without oppressing them by illegal exactions or other severities.

"For the accomplishment of these purposes, Rājā Fateh Singh was selected, but he died in 1814, while the arrangement was under discussion, and at the recommendation of Captain Edward Roughsedge, then commanding the Rāmgarh Battalion, the rights of Government were transferred to his son Rājā Ghanshām Singh. In effecting this measure, Government made a considerable pecuniary sacrifice; but the objects proposed to be carried into execution were important; as, besides rewarding a loyal and meritorious family, it provided for the internal management of the estate, for the realization of the revenue, and eventually for the general protection of a vulnerable frontier. It was at the same time deemed of primary moment that the rights and immunities of the *jāgīrdārs* should be maintained inviolate, for the furtherance of which object it was ordered that the amount of land-tax payable by each *jāgīrdār* respectively should be endorsed on the back of the document which transferred the district to Rājā Ghanshām Singh, in order to prevent future litigation and to give stability to the arrangement. Nor did the prior zamīndār, Rājā Churāman Rai, sustain any real injury by the sale of his estate. He had long been a mere cipher in its management, and nearly an idiot in understanding, dissolute, extravagant, and thoughtless, a character which unfortunately applies with too much justice to almost all the jungle zamīndārs. He was so indolent as wholly to abandon his station and responsibility, and was always ready to give *carte blanche* to any person who would undertake to supply him with 5 or 6 rupees daily for

his personal expense. This miserable chief of a distracted territory had no lineal heirs, and the collateral pretender was utterly unfit for the vocation." *

The grant of Palāmau to Ghanshām Singh, Rājā of Deo in the Gayā district, had been made as a reward for services he and his family had rendered on several occasions in quelling the disturbances of the turbulent Cheros and Kharwārs, and it might have been expected that he would have been able to control them. These hopes were disappointed, for in 1817 the people again broke out in open rebellion, in consequence of the oppression of the agents whom he appointed to collect the revenue; and in 1818 Government revoked the deed of grant and resumed the management of the estate. Under Government rule Palāmau remained quiet until 1832, when the great rebellion of the Kols broke out and the Cheros and Kharwārs rose. Throughout Chotā Nāgpur the Kols attacked the Hindus, Muhammadans and other foreigners who were settled in their villages, drove them from their homes and property, which were burnt or plundered; and sacrificed numbers of those who fell into their hands to their excited passions of revenge and hatred. But the excesses which attended the rebellion were not so great in Palāmau as elsewhere, and the rising was soon quelled. Since that time the district has been peaceful with the exception of a short interlude of revolt during the Mutiny of 1857.

MUTINY OF 1857.

The following account of the course of the Mutiny in Palāmau is taken from the "Minute of the Lieutenant-Governor on the Mutinies as they affected the Lower Provinces":—

"The population of Palāmau district is composed chiefly of two tribes—the Cheros and the Kharwārs, with a sprinkling of Kols and other savages, who took little part in the outbreak, and a few Brāhmans, Rājputs and others, who were opposed to the insurgents. The Cheros, a spurious family of Rājputs, said to have originally come from Kumāon a few centuries since, dispossessed the original reigning family and established one of their own chieftains in their room. His descendants continued long to hold the chiefship, and the representative of the family, the last Rājā, died within the last few years, leaving no direct heirs. The Cheros having thus established themselves, strengthened their position by conferring *jagīrs* on their followers, and numbers of these *jāgīrdārs*, with impoverished and deeply mortgaged estates, still exist. The Kharwārs are also settlers said to have come originally from the hills west of Rohtās.

* It is reported that Rai Kishun Baksh Rai Bahādur of Nawā and Bābu Bhagwat Baksh Rai of Bisrāmpur are members of this collateral branch.

They are divided into several clans, of which the principal are the Bhogtās, with whom alone we are now concerned.

"This tribe, inhabiting an elevated plateau between the high lands of Sirguja and the low country of Palāmau, from which they are further separated by a range of hills, of which they hold the passes, and possessing almost inaccessible fastnesses, have been long known as a race of turbulent freebooters, and their late chief died an outlaw. On his death it was considered a wise policy to confer this territory in *jāgīr* on his sons, Nilambar and Pitambar, with a nominal quit-rent, and the policy was long successful in suppressing the natural marauding tendencies of these chiefs. Unfortunately, however, Pitambar was at Rānchī when the outbreak took place, and thinking that here was the end of British rule, and still further confirmed in this opinion by the behaviour of the two companies of the 8th N. I., who passed through Palāmau on their way to join Amar Singh, the two brothers determined on declaring their independence, their first efforts being directed against the loyal Rājput *jāgīrdār*, Thākurai Raghubar Dayāl Singh, and his equally loyal cousin Thākurai Kishun Dayāl Singh, with whom they had long been at feud. Many of the Chero *jāgīrdārs* were induced to join them, partly on the promise made of placing a Chero chief on the throne, partly, no doubt, in the hope of retrieving their now impoverished and decayed fortunes; and late in October a force of about 500 Bhogtās, with others of the Kharwār clans and a body of Cheros, under the leadership of Nilambar and Pitambar, made an attack on Chainpur, Shāhpur and Lesliegani. The attack on Chainpur, directed as has been said against the loyal zamīndārs, Raghubar Dayāl and Kishun Dayāl Singh, on account of ancient enmities, was repulsed; but at Lesliegani they succeeded in doing some damage, destroying the public buildings, pillaging the place, and committing some murders. Lieutenant Graham, who was at this time officiating as Junior Assistant Commissioner in the district, having advanced with a small body of not more than 50 men, the Bhogtās retreated into the hills of Sirguja, whither, in consequence of the smallness of his force, he could not pursue them, and he was obliged to await reinforcements at Chainpur.

"By the end of November the whole country appeared to be up in arms, and Lieutenant Graham, with his small party, was shut up and besieged in the house of Raghubar Dayāl, whilst the rebels were plundering in all directions It had been proposed to send the Shekhawati Battalion into Palāmau; but at my urgent request two companies of H. M.'s 13th L. I., which

were at this time quartered at Sasarām, were directed to proceed under command of Major Cotter to the relief of Lieutenant Graham. I at the same time called upon the Deo Rājā to furnish a contingent for service in the disturbed district. On the 27th November the station of Rajharā had been attacked by a very large body of Bhogtās, and Messrs. Grundy and Malzer, who were employed there on the part of the Coal Company, after holding their house as long as possible, at last with some difficulty made their escape.

"The two companies under Major Cotter, with two guns, accompanied by Mr. Baker, the Deputy Magistrate of Sasarām, crossed the Son near Akbarpur on the 30th November. Instructions meanwhile had been sent to Lieutenant Graham that on being relieved he was at once to fall back with the force, advancing again hereafter when he should have the means of doing so. The detachment reached Shāhpur on the 8th December, and were joined by Lieutenant Graham. One of the principal leaders of the insurgents, Debī Baksh Rai, was at this time captured. On the advance of the force, the rebels retreated; but burnt the village of Mankā, near Palāmau Fort, and destroyed the house of Bhikhāri Singh, a zamīndār of some influence, who had lent great assistance to Lieutenant Graham. Major Cotter was ordered to return to Sasarām *viâ* Sherghāti to clear the *ghāts* in that direction, and Lieutenant Graham accompanied him for some distance; but the rebel force seemed to be breaking up, the capture of Debī Baksh Rai noted above had the effect of disheartening them, and the Deo Rājā having now joined with his contingent of 600 matchlockmen and 100 sowārs, I permitted that officer to return, and, advancing towards his former position, he reached Kishunpur on the 22nd December. Pātan Ghāt, which had been held by the Bhogtās, was abandoned on his approach. The rebels also withdrew from Chainpur, having made an unsuccessful attack on Rankā fort, where they were repulsed by Kishun Dayāl.

"By this time Lieutenant Graham had received a further reinforcement of 600 men, supplied by the Sarbarāhkār of Sirguja, and was able not only to maintain his position, but to act on the offensive, and hearing that Premānanda, Ilākādār of Kundā, was in the neighbourhood, he sent out a party which surprised this chief, the most influential leader of the Kharwār tribe, with four of his principal men and 75 followers. Nilambar Sāhi was still collecting men, and had lately plundered two villages; he, however, kept most carefully to the jungles, and allowed no opportunity of attacking him. Sirguja was also invaded by the

followers of the Singhraulī Rājā, a contumacious dependent of the Rewah Rājā, from whom he had no authority for thus acting.

"On the 16th January Captain Dalton himself started for Palāmau with 140 men M. N. I. under Major MacDonell, a small party of Rāmgarh Cavalry, and a body of matchlockmen under Parganait Jagat Pāl Singh, a chief who on this and other occasions displayed very remarkable loyalty and attachment to the Government, and has been rewarded with a title, a *khilat* and pension. He reached Mankā on the 21st January, and being joined during the night by Lieutenant Graham, next morning after a reconnaissance of the Palāmau Fort, finding that it was held by the enemy, they determined on an immediate attack, and advancing in three columns, against which the enemy for some time kept up a brisk but ill-directed fire, succeeded in dislodging them, when they fled, leaving guns, ammunition, cattle, supplies and baggage behind them. Ten bodies of the enemy were found; our loss amounted only to one killed and two wounded. Letters to Nilambar and Pitambar Sāhi and Naklaut Mānjhī were found with the baggage, and amongst them communications from Amar Singh, promising immediate assistance from Kuar Singh. Some leading insurgents were captured about this time. Tikait Unaras Singh and his Dīwān Sheikh Bhikhārī were convicted of being concerned in the rebellion, and executed.

"The Commissioner remained at Lesliegani till the 8th February, collecting supplies and making preparations, and he now determined on forcing the passes into the Bhogtā country, having with him a force of upwards of 2,000 men, whilst that of Nilambar and Pitambar were said to be much reduced and not to number more than 1,000. Meanwhile, he had issued *parwānas* for the attendance of the various *jāgīrdārs*, most of whom readily responded to his call; but the most powerful and influential of them all, Bābu Bhawānī Baksh Rai, head of the Chero family, did not, for some time, make his appearance, and was said to be collecting a large force to oppose Captain Dalton, and to have entertained a number of the Rāmgarh mutineers. On the 3rd of February, however, he too came in, and thus removed a principal obstacle to our onward movement. Having divided his force, Captain Dalton sent one body with Kishun Dayāl Singh and others to Shāhpur to advance against the Bāghmārā Ghāt, whilst he himself moved to the attack of the Tungāri Ghāt. As he approached this place on the 10th February, he learned that the insurgents, who had held possession of the pass, were plundering the village of Harnāmānr in his immediate neighbourhood. Lieutenant Graham, with a party of sowārs, dashed on, and

succeeded in intercepting the enemy, and rescuing a band of captives and a herd of cattle which they were in the act of driving off. Three prisoners were also taken, one a leader of some consequence. Two out of the three were hanged, whilst the third was kept for the sake of information, which he seemed able and willing to communicate.

"No opposition was attempted to their entering the Bhogtā country, and on the 13th they reached Chemū, on the banks of the Koel, the principal residence of the insurgent brothers, where they had a fortified house. Captain Dalton crossing the Koel, the rebels did not await his attack in the village, but retreated and took up positions behind masked breastworks of stones on the sides and ridge of a hill overhanging the village. These were carried in succession, and the enemy put to flight. A dafadār of the Rāmgarh Cavalry was killed at the beginning of the flight. The village and the fortified house were afterwards destroyed, as was Saneyā, another stronghold of the rebels close to Chemū, which was also found deserted. Large quantities of grain were seized, as well as herds of cattle; and several herdsmen, who had been captured by the rebels, were released.

"The Commissioner remained in the Bhogtā country till the 23rd of February, but was not successful in capturing the ringleaders, Nilambar and Pitambar. Parties were constantly sent out in all directions, who penetrated to their hill and jungle fastnesses, in some instances, as was evident, just as the fugitives had made their escape. A few influential men were taken; but neither threats nor promises had any effect in inducing them to reveal the hiding-places of their chiefs. A full retaliation was, however, exacted for all the mischief done by them. Their villages were destroyed, their goods and cattle seized, and their estates confiscated to the State; but whilst stern justice was thus meted out to the inciters of this rebellion, every endeavour was made to conciliate their less guilty followers and the inhabitants of the country, which now seemed to be gradually settling down.

"In the Nāwāgarh hills a body of rebels was collected in the middle of March under Ganpat Rai and Bishunnāth Sāhi. Captain Dalton proceeded to Lohārdagā with the intention of attacking them, but falling ill was obliged to depute the duty to Captain Oakes, who with a party consisting of Madras Rifles, Rāmgarh Irregular Cavalry, and 160 of the Kol and Santāl Levy, under the command of Captain Nation, by a rapid march succeeded in surrounding the enemy, who were so completely surprised that they made no resistance. Bishunnāth Sāhi was captured on the spot, and Ganpat Rai, who succeeded for the time

in making his escape, was soon taken and brought in by some zamīndārs and matchlockmen, who had been sent in pursuit. These rebels were afterwards tried, found guilty, and executed.

"Nothing worthy of being recorded has since happened in the district of Palāmau, and the restoration of complete tranquillity and confidence seems now only to be a question of time. Nilambar and Pitambar Sāhi are still at large, miserable fugitives deserted by their followers, and the Commissioner is of opinion that no further danger need be apprehended from them. I must not quit the subject without recording my high admiration of the conduct of Lieutenant Graham, who, without another Englishman near him, surrounded by thousands of the enemy, never thought of retreat, and by maintaining his post, prevented the district from falling entirely into the hands of the insurgents."

To the above account it will suffice to add that Nilambar and Pitambar Sāhi were eventually captured, tried and hanged; and with their capture the district was tranquillized. Thākurai Raghubar Dayāl Singh of Chainpur, Thākurai Kishun Dayāl Singh of Rankā and Bhikhāri Singh of Mankā were granted *jāgīrs* in recognition of the loyal services they had rendered.*

FORMATION OF THE DISTRICT.

In the early part of the 19th century the Palāmau *pargana* formed part of the district of Rāmgarh, the headquarters of which were at Chatrā; but in 1834 it was transferred to the district of Lohārdagā. In 1853 it was made a subdivision of the latter district, the headquarters being fixed at Kordā on the Jamīrā Pāt plateau in Sirguja; the first subdivisional officer was Mr. Emerson, and the next Sir Rivers Thompson, subsequently Lieutenant-Governor of Bengal. The revenue, however, had been collected for many years by an establishment stationed at Lesliegan], a town founded by Mr. Leslie, Collector of Rāmgarh, at the close of the 18th century; and the headquarters were removed there in 1859. The site was, however, reported to be unhealthy, and accordingly the present station of Daltonganj was chosen for the headquarters of the subdivision in 1863. In 1871 the *parganas* of Japlā and Belaunjā, containing 650 square miles, were transferred to it from the district of Gayā, in which they had hitherto been comprised.

In 1891 it was proposed to constitute Palāmau a separate district in order to secure greater efficiency of administration. It was pointed out that the district of which it formed part had the

* It is reported that Rājā Bhagwat Dayāl Singh of Chainpur, Rājā Govind Prashād Singh of Rankā, and Kumār Raghunāth Singh of Mankā are the respective representatives of these three loyal families.

enormous area of 12,044 square miles, equal in extent to the Presidency and Chittagong Divisions; that the people, taken as a whole, were as different from the inhabitants of the remainder of the district as the latter from their neighbours on the east, and that the land tenures were as different from those in Chotā Nāgpur proper as the latter were from those in Lower Bengal. Its distance from the district headquarters added to the difficulties of administration, the nearest part of the subdivision being 60 miles and the furthest part 150 miles from Rānchī, while Daltonganj itself was 104 miles distant from that place. It was, accordingly, recommended that Palāmau should be formed into a separate district, with the addition of the Torī *pargana*, where conditions were somewhat similar, the people, their manners, customs and land tenures, being quite different from those of the rest of the Chotā Nāgpur and more like those of Palāmau. These proposals were accepted; it was realized that Palāmau required the close and immediate supervision of a District Officer; and, accordingly, it was constituted a district from the 1st January 1892. The first Deputy Commissioner was Mr. W. R. Bright, I.C.S., C.S.I.

CHAPTER III.

THE PEOPLE.

GROWTH OF THE POPULATION. THE first census was taken in 1872, when the population of the district as now constituted was returned as 423,795, giving a density of only 86 persons to the square mile. At the census of 1881 it was found that the population had increased to 551,075, representing a growth of no less than 30 per cent., but there can be little doubt that some of this apparent large increase was due to the incompleteness of the first census, though it was also partly a real increase caused by the extension of cultivation which followed the settlement of the Government estates in 1869-70. The result of the census of 1891 was to show that the population numbered 596,770, the increase during the decade amounting to 8·3 per cent.

CENSUS OF 1901. The census of 1901 disclosed a further increase of 22,830 persons or 3·8 per cent., the total population being returned as 619,600 persons. This diminished rate of progress was in a large measure due to the scarcity which prevailed in three years of the decade. The district had had short crops in 1895, 1896 and 1899; and the crop failures of 1896 and 1899 both culminated in famine. The increase of population was greatest in the north of the district, where there is the largest proportion of land fit for permanent cultivation, and where the inhabitants belong to castes that do not emigrate to tea-gardens or readily leave their homes. The only thānas which showed a decrease are Bālumāth and Lātehār in the south-east, where the conditions are very similar to those in the decadent part of Hazāribāgh that adjoins them.

Density of population. The district supports only 126 persons per square mile, and the density of population is less than in any other district in the Province except Angul. It varies very much in different parts of the district, but generally it may be said that it is greatest in the north and gradually decreases as one approaches the southern boundary. There is a fairly dense population in the fertile valleys along the course of the Son, Koel and Amānat, but away from these rivers, and especially in the south and west, with the exception of *tappā* Chhechhāri and parts of *tappā* Untāri, the country is wild and inhospitable, and its inhabitants are few in number.

Even in the most thickly populated thānas there are large tracts of uncultivated land, and it is still no uncommon thing to ride 10 miles without seeing any human habitations. Density is greatest in the Daltonganj thāna, where there are 187 persons to the square mile; and this thāna is closely followed by Husainābād and Pātan, with 175 and 174 persons per square mile respectively. It is least in the Mahuādānr thāna, which carries only 54 persons to the square mile, but this is because the large tract comprising the Gārū outpost has been made into a Government forest, covering no less than 92 square miles. No part of the district, however, has shewn such a phenomenal development as this, for the population has more than doubled itself in the last 30 years. The only other thāna which can rival it in this respect is Daltonganj, where the population has increased during the same period from 5,3976 to 105,479.

Migration. At the census of 1901 it was found that the number of immigrants, *i.e.*, of persons born elsewhere, was 38,838, representing 6·26 per cent. of the population—the highest proportion recorded in any of the districts of Chotā Nāgpur. This is apparently due to the undeveloped state of the district and the large area awaiting reclamation. On the other hand, the number of emigrants, *i.e.*, of persons born in Palāmau but enumerated elsewhere, was only 32,210 or 5·19 per cent. of the population—the lowest proportion in the Division; but it is doubtful how far the statistics of emigration are reliable, for the district is a new one, and possibly some of its emigrants described themselves as having been born in Lohārdagā, the old name for Rānchī, of which Palāmau was a subdivision until 1892, and were thus credited to Rānchī in the returns.

The general result of the census was to show that the district gains more than it loses by the movements of the people. It gains from Gayā, Shāhābād and Hazāribāgh, and loses slightly to Rānchī and considerably to the Tributary States. The net result of local migration is a gain, not large, but still sufficient to counterbalance the loss on account of emigration to a distance, which, so far as the figures go, is on a smaller scale than from any other district of Chotā Nāgpur. The Assam returns show that only 6,766 natives of this district were enumerated in that Province, compared with ten to thirteen times that number from Rānchī and Hazāribāgh. As already noted, however, this may be due in part to many of the Palāmau emigrants having been assigned to the category of persons born in Rānchī.

Towns and villages. The only places which can be dignified with the name of town are Daltonganj and Garhwā, which have a population of

5,837 and 3,610 respectively. The remainder of the population is contained in 3,184 villages, most of which are very small, 71 per cent. of the rural population living in villages containing less than 500 inhabitants, while the average number of residents in each village is only 192.

LANGUAGE. Palāmau is a polyglot district. The great majority of the people speak the dialect of Bihāri Hindī known as Bhojpurī, but in the north-east Magahī is current. Besides these Aryan languages, Orāon is spoken by 3·5 per cent. of the people, while 2·7 per cent. use various dialects of the Mundā family, chiefly Mundāri, Birjia and Korwā.

Bhojpurī. The purer form of Bhojpurī, known as Standard Bhojpurī, is spoken in the strip of country stretching along the bank of the Son. Though this dialect is classed as Standard Bhojpurī, it has several divergencies from the language spoken in Shāhābād. In the remainder of the district the people speak a corrupt form of Bhojpurī, which has undergone modifications, partly by the influence of the Magahī dialect, which surrounds it on three sides, and of the Chhattīsgarhī spoken to its west, and partly owing to the influx of words into its vocabulary which belong to the languages of the non-Aryan population. It is generally known as Nāgpuria or the language of Chotā Nāgpur proper; but it is also known as Sadrī, and is called by the non-Aryan Mundās "Dikkū Kājī," or the language of the Dikkū or foreigners. The word Sadrī in this part of the country is applied to the language of the settled, as distinct from the unsettled population; thus the corrupt form of Chhattīsgarhī, which is spoken by the semi-Aryanized Korwās, who have abandoned their original Mundā language, is known as Sadrī Korwā, as compared with the true Korwā language, belonging to the Mundā family, which is still spoken by their wilder brethren.*

Other languages. Magahī, *i.e.*, the dialect of Magadha or South Bihār, is current in the north-east of Palāmau, and does not differ in any material respect from the language spoken in the adjoining district of Gayā. Orāon or Kurukh is mainly spoken in the south of the district; and Mundā dialects by various tribes of aboriginal descent.

RELIGIONS. According to the census of 1901, 86 per cent. of the population are Hindus, 8·4 per cent. are Muhammadans, and 4·2 per cent. are Animists. Those returned as Hindus, however, include a considerable proportion of semi-Hinduized aborigines, and the fact that the number of Animists was shewn as having decreased by 17,000 since 1891, in spite of the fact that the aboriginals are a

* G. A. Grierson, Linguistic Survey of India, Vol. V, 1903.

hardy and prolific race, points partly to incorrect classification and partly to their absorption among Hindus. It is possible also that there has been a loss owing to the migration of the more aboriginal tribes to the adjoining Tributary States, a part of the general retreat of these people before the advance of Aryans from the bordering districts of Bihār.

Hindus. Hindus number altogether 533,175 souls and include 27,968 Brāhmans, but the great majority consist of castes or tribes of aboriginal descent, such as Cheros and Kharwārs, which have gradually been assimilated into the Hindu social system, while the jungly tribes are following their example. These semi-Hinduized aborigines still retain, in a large measure, the habits and beliefs of their forefathers, and the line of division between them and Animists is very faint. In fact, popular Hinduism in many parts of Palāmau consists largely of the worship of spirits, mostly evil and rarely benevolent, and a belief in sorcery, witchcraft and fetichism. In the thānas of Bālumāth, Chattarpur, Lātehār, Mahuādānr and Rankā comprising 2,592 square miles, or more than half the entire area of the district, there is approximately only one Brāhman, whether man, woman or child, to every square mile; and in these tracts orthodox Hinduism with its Brahmanical rites is far less prominent than the Animistic observances of the aboriginal tribes. How largely the latter enter into the religious life of the so-called Hindus of Palāmau will be apparent from the subsequent account of the religious beliefs of several Hindu castes, as well as from the following description (based mainly upon that given in Mr. Forbes' Settlement Report) of three important members of the village community, the Baigā, Dihwār and Ojhā.

Baigās. The Baigā, or, as he is sometimes called in the south, the Pāhān, is the village priest, whose duty it is to propitiate the tutelary deities of the village and to keep away evil spirits. No village is without one, and such is the superstition of the people that they would rather desert their land than remain without a Baigā. Generally, he is a member of one of the aboriginal tribes, but even Brāhmans are, though rarely, found holding the office. Persons of aboriginal descent are, however, preferred, the belief apparently being that, as they are the oldest inhabitants, they are best acquainted with the habits of the local spirits, and that persons who have Hindu and Brahmanical tendencies could only offer a divided allegiance to the sylvan deities, and would therefore not be acceptable to them. Dosādhs and Bhuiyās are often Baigās, and the person preferred is a member of the tribe that first cleared the jungle.

The chief deity whom the Baigā has to propitiate is the village god, who presides over the sowing and gathering in of the crop and is worshipped at seed-time and harvest with offerings of sheep, kids, or goats. Symbols of him, in the form of a rough stone daubed with vermilion, are found at the foot of different trees in almost every village throughout Palāmau, and all castes, from Brāhmans to Bhuiyās, join in his worship. Besides this deity, there are a number of evil spirits who are responsible for the appearance of disease among man and beast, and the Baigā is bound to offer up the necessary sacrifices to prevent their coming or to drive them away. A good harvest again depends on his exertions, and accordingly it is his duty to make sacrifices and propitiate the spirits before ploughing is begun. For this purpose, he levies contributions of money, grain, cloth, fowls and goats from the villagers, and until these sacrifices have been performed, no one would think of yoking a plough.

Besides these priestly functions, the Baigā is regarded as the depositary of village lore. He is supposed to be better informed of all that concerns the village than any one else, to have a thorough knowledge of its boundaries, and to be able to point out each man's tenure. Among the jungle tribes, if he is one of their own race or a member of the hereditary priestly family, he is the arbiter in disputes as to land or rent, and is the oracle in questions affecting the ancient customs and rights of the village, with all of which he is supposed to be intimately acquainted. The office is hereditary, but should there be frequent sickness in the village, if cattle die or other calamities occur, the Baigā is blamed for negligence in his duties, and is ousted from his position. In the event of its becoming necessary to appoint a Baigā, a meeting of the village community is held, and the successor is chosen by vote or, among pure aboriginals, by lot; the individual selected is then called upon to accept the post, and in the event of his doing so, a day is fixed for the ceremony of installation. On the appointed day the whole village community meet in solemn conclave. The village head-man presides, and calls upon the candidate to state publicly whether he is willing to accept the Baigāship. On his giving a reply in the affirmative, the emoluments he will receive and the duties he will have to perform are explained to him; and he is then conducted round the boundaries of the village, the different landmarks of which are pointed out to him. After this, the whole party return to the place of meeting, where the president taking up the Baigā's wands of office, which are called *chhuri katāri*, solemnly hands them to

the new incumbent, and the installation is complete. These wands are the sacrificial instruments, and are heirlooms of the village; they are presented in the formal manner described above to each successive Baigā, and are used solely in sacrifices. In every village there are lands specially set apart for the support of the Baigā, which he holds rent-free. When his jurisdiction extends to two or more villages, he holds land only in the village where he actually resides, while the others make him payments in kind.

The Baigā is often also the recognized village messenger on behalf of the landlord. This is doubtless because he receives from the latter a grant of land, in return for which he has to help in the extension of cultivation, the calling in of settlers, and the carrying of responsible messages. There is no part of daily life to which his influence is not supposed to extend. It is, indeed, not an uncommon thing, when there has been a blank tiger beat, for the villagers to recommend that the Baigā should be taken to task, sometimes even chastised, for not doing his *pūjā* efficiently. In this, as in other things, the villagers are convinced that failure is due to his laziness or roguery.

Some villages, especially those lying to the south of the district, have a functionary called Dihwār or Deorā in addition to the Baigā. While the latter propitiates the village deities at the *gāonhel* or village shrine, the former's duty is to be vigilant that evil spirits do not disturb the peace of the village. If they are angry, crops are said to fail; and to safeguard against this misfortune, they have to be kept in good humour and frequently appeased with offerings of fowls, which are killed in some quiet corner of the village, and afterwards taken by the Deorā. He is precluded, it is said, from killing animals or going to the *gāonhel* or village shrine. He is quite separate from the Baigā, and neither interferes with the other, but both are considered equally important for the welfare of the village. **Dihwārs.**

The third member of this triumvirate consists of the Ojhā or exorcist, of whom Mr. Forbes has given the following account:— **Ojhās.**
"Any one may become an Ojhā; consequently, the office is not confined to any particular caste or tribe. The science is regularly taught by professors, but only during the ten days of the Dasaharā, when by payment of a certain sum any one who likes can learn the art. Such is the belief in the power of the Ojhā that he is called in on every occasion. A Kumhār spoils a lot of tiles or earthen vessels, and immediately fancies that his hand has lost its cunning by the influence of some evil spirit. Land won't yield, a cow won't give milk, a bullock dies, or a child sickens—all call for the

services of the Ojhā. On all these occasions he gets a fee, sometimes in money, generally in kind. He is not very honest, and often imposes on the credulity of the people, and there is no doubt that he and the Baigā often go hand in hand in robbing their unfortunate dupe. For instance, an epidemic appears among the cattle ; the Ojhā is at once sent for and requested to exorcise the evil spirit. This he vainly attempts to do, and at last pretends to discover that the evil has been caused by the neglect of the Baigā to perform certain sacrifices. The Baigā, when called upon, of course admits this, and signifies his readiness to do what is requisite to remove the evil, as soon as the people have provided him with the necessary means. Large quantities of money, cloth, grain, etc., are immediately collected from the villagers and are shared in by the two rogues. The mummeries performed by Ojhās in exorcising evil spirits consist in making passes, blowing with the mouth, and in muttering incantations, which are nothing more than a repetition of the names of certain famous spirits. After this, they put on a wise look, declare that the spirit has been appeased and the patient is sure to recover, demand their fee, and depart. If, as is frequently the case, the patient does not recover, they fall back on the unanswerable argument—God's will. If all goes well, they get the credit."

To this it may be added that the Ojhās are consulted not only by the lower classes, but also by the most orthodox Rājputs and Kāyasths, by members of the leading families and even, it is said, of the local Bar, as to the birth of a son. If the prophecy comes true, the vow made is religiously fulfilled ; and very handsome are the presents the Ojhās sometimes get in this way.

Witchcraft.

"The people," Mr. Forbes goes on to say, "are firm believers in the power of witchcraft and the evil eye, and have a wholesome dread of witches or *dāins*, as they are called ; and one of the most important part of an Ojhā's duty is the denunciation of these people. From repeated failures the people have not that implicit faith in the Ojhās they once had, but even the most enlightened among the Aryans believe in witchcraft. Not a child can sicken, nor a cow, nor a bullock be struck with disease, but a witch is supposed to be the author. The art practised by Ojhās, they say, can be learned by any one, but witchcraft emanates from the devil. The witch casts her spell in secret and never declares herself ; she wishes a child to die, and she has only to say "What a fine fat child that is," or "How well that child is looking," and the spell is cast. The child is sure to sicken without any apparent cause and die. A mother is proud of her child's hair, and the witch, who is

spiteful in all her actions, in the dead of the night takes a piece of thread, mutters the child's name, severs the thread, and in the morning the beautiful hair is gone. Another mode of casting spells adopted by witches, and implicitly believed, is that in which the witch is supposed to come to the house at midnight. Without entering it, with an instrument resembling a native inoculating lancet, she scores certain marks upon the wall of the house, mentioning at the same time the name of the person on whom she is working her spell, and muttering certain incantations. In the morning a *facsimile* of the mark made on the wall appears on the arm or other part of the body of the victim, who always dies. This has been said to occur to several persons in a house, one on each successive night, till at last the whole family have been obliged to fly.

"The ceremony performed by the Ojhā in order to discover a witch is called *kānsa kurthī*. On these occasions, the Ojhā, when sent for, either calls in the assistance of a brother in the craft or brings with him one or two of his *chelās* or disciples who have a smattering of the art. A bell-metal dish is produced and filled with pure water, into which a small handful of *kurthī* (a coarse kind of pulse) is thrown. This dish is placed in the sun, and the Ojhā, repeating in a low voice certain incantations, looks steadily into the dish, observing the shadow produced by the grains which float on the top of the water. After the lapse of some minutes, he retires to a short distance, and his place is taken by another, who also looks into the dish. The Ojhā then proceeds to question him as to what he sees: question succeeds question: now he sees this, now that: but there is, of course, collusion between the parties, and the person whom it has been previously agreed upon to be denounced is eventually named. The Ojhā has, of course, a grand opportunity given him of revenging himself on any person with whom he is at enmity; but when he has no such private revenge to satisfy, a barren woman is generally chosen as the one to be denounced. Murder often follows the denouncement of witches, for which the Ojhās are to be held responsible. The unfortunate woman denounced is perfectly helpless; she cannot hope to be believed, let her deny ever so stoutly; and all she can do is to consent to withdraw the spell."

As a rule, the victims of the Ojhās' denunciations are harmless old women, but some women have as implicit a belief in their powers for evil as the villagers. Thus, a few years ago there was a case of a young cultivator whose child died one night when he was watching his fields. On his return, he found an

old hag crouching outside the fence in front of his house. She had swept a piece of ground and laid on it the body of a dead vole with its head pointing towards where the sick child was lying. Behind it were the bodies of three dead grasshoppers, and behind them again five clay figures of mice. These she had marshalled in a row, muttering to herself the while, and was pushing as if to an attack. When such cases as this occur, it is small wonder that the superstitious terror which is provoked among a people imbued with a firm belief in witchcraft should often be the cause of murder.

Animists. The number of persons returned as Animists at the census of 1901 was only 26,111, and they are thus out-numbered by the Hindus in the proportion of 20 to 1; but as already mentioned there is some reason to doubt whether these figures are altogether accurate, *e.g.*, in the Chattarpur thāna only 26 persons are shewn as Animists and 41,497 persons are Hindus, but the latter include only 519 Brāhmans. The Animists have a vague belief in an omnipotent being, who is well disposed towards men, and whom, therefore, it is unnecessary to propitiate. Then come a number of evil spirits, who are ill-disposed towards human beings, and to whose malevolent influence are ascribed all the woes which afflict mankind. To them, therefore, sacrifices must be offered. These malevolent spirits are sylvan deities, spirits of the trees, the rocks, and the streams, and sometimes also of the tribal ancestors. There is no regular priesthood, but some persons are supposed to be better endowed with the powers of divination than others. When a calamity occurs, one of these diviners or soothsayers is called on to ascertain the particular demon who is offended, and who requires to be pacified by a sacrifice. Instances of these beliefs will be given later in the account of the different tribes and castes.

Muhammadans. Muhammadans number 52,353, and no less than 41,347 or four-fifths of the total number are found in the northern half of the district, in the Daltonganj, Garhwā, Husainābād and Pātan thānas. Some of them are the descendants of immigrant Muhammadans, but the majority are descendants of converts, and still retain many of the superstitions and customs of their ancestors. A small minority are Pathāns, who are found in small colonies in the Husainābād thāna; the *pargana* of Japlā comprising this thāna was formerly the property of a family of Nawābs, and consequently a number of high class Muhammadans were induced to settle there.

Altogether 31,454 are Jolāhās, who are very ignorant of the tenets of their religion. A striking example of their

ignorance is reported. It is the custom of Muhammadans to recite an Arabic text, when slaughtering an animal for food; and the local Jolāhās finding it hard to remember the text, laid their difficulty before their Murshid or religious head. This holy man quickly and easily found a solution by breathing on a knife and handing it over to the head of the Jolāhā community with the remark that that would serve their purpose. Since then every Jolāhā family has used such knives and has been relieved of the necessity of quoting the Arabic text. In the Pātan thāna they even worship the sun, and two popular deities are the five personages known as Pānch Pīr, and Sheikh Saddu. The former are propitiated by offerings made periodically and also on special occasion such as marriages and deaths. Their altar consists of a small mound of earth in a room set apart for the purpose, on which sweetmeats and other offerings are laid. The omission of such offerings is believed to entail serious consequences, and every calamity that visits the family is ascribed to remissness in the discharge of the propitiatory worship. Sheikh Saddu, who has no visible representation, is appeased by sacrifices of goats. It is believed that, unless he is duly propitiated, he takes possession of women, who go into an ecstatic state and pour forth volumes of incoherent verse when under the influence.

Another peculiar ceremony consists of making offerings to the spirits of deceased ancestors. A plate with sweetmeats is set apart for each of the spirits whom it is sought to propitiate; lamps are lit, and some holy man of the locality repeats verses from the Korān over each plate, calling on the deceased by name. One plate is specially dedicated to Hazrat Bībī; it remains covered over, and the covering can only be removed and the contents partaken of by females.

There are altogether 7,908 Christians in the district, of whom 7,897 are natives. Nearly all of these are found in the Mahuādānr thāna, where a Jesuit Mission has met with great success among the aboriginal population of the Chhechhāri valley, though it is said that the converts, on the appearance of any trouble, shew a desire to return to their Animistic cult. It is reported that Christian missionaries from Barwe in the Rānchī district first visited this part of this district in 1890. In 1895 Father Dehon, a Belgian Father of the Society of Jesus, founded the station of Mahuādānr, where he built a bungalow, school and church. There is now a boarding house attached to the school, where some 200 boys are taught. An American Protestant Mission has also been started at Daltonganj in 1906. Christians.

CASTES AND TRIBES. The situation of Palāmau between the Chotā Nāgpur plateau, the home of aboriginal races, and the Gangetic valley, with its Aryan civilization, has resulted in a mixed population consisting partly of autochthonous tribes and partly of people of Aryan descent. The following is a brief description of the principal castes and tribes found in the district.

Bhuiyās. The largest caste consists of the Bhuiyās, a race of aboriginal descent, who number 72,591 souls; of these 32,856 or nearly half are found in the Daltonganj and Pātan thānas along the valleys of the Amānat and Koel. They are a dark well-proportioned race, with black, straight hair, plentiful on the head but scant on the face; they are of medium height, with figures well-knit and capable of enduring great fatigue, but light framed and not presenting any great muscular development. Their features are generally of very much the same cast, the nose slightly elevated and rather retroussé, the eyes well shaped and straight, but never very large or deep set; the cheek and jaw bones are projecting and give breadth and squareness to the face.

They are an offshoot of the great Dravidian tribe of Bhuiyās, which once held considerable power and still numbers nearly two-thirds of a million; but in this district they have become a degraded race, from whom the general labourers and serfs (*kamiyās*) are recruited. Nominally Hindus, the veneer of Hinduism has only recently been laid on, and beneath it may be observed many traces of the primitive Animism common to Dravidian tribes.

The worship of Bīr Kuar is especially affected by them, Bīr Kuar being a deity believed to have been originally a Bhuiyā who was killed for an intrigue with an Ahīr woman. Two posts are set up outside the village, and a pit between them is dug and filled with wood, which is set alight. The Baigā or village priest having bathed and put on a yellow robe, sprinkles *ghī* over the fire, and spreads a layer of grass on it. He then rides through the fire mounted on a pig; the latter is next stabbed to the heart, and the flesh distributed among those present, any portion left over being buried. Another offering consists of a hen which is made to eat rice and then killed. The deity is supposed to attend the sacrifice and to beat his worshippers with a leather whip plied by a man impersonating him.

Ahīrs. The Ahīrs or Goālās, with a numerical strength of 45,250, are the most numerous caste of Aryan descent. They are cultivators and herdsmen, and are one of the wealthiest classes in Palāmau. They are eagerly sought after as tenants, and, it is said, are given various concessions because of the benefit their cattle do to the

land by manuring it. The majority, however, even towards the south of the district, find insufficient pasturage, and migrate with their herds to the tablelands of Sirguja on the approach of the hot weather, returning when the rains have set in to graze their cattle in the lowlands.

Like the Bhuiyās, they worship Bīr Kuar, who is represented by two wooden posts. The officiating priest calls on the deity to appear, and throwing himself into an ecstatic state, leaps about lashing his body with a hair rope. When this fit has passed, the worshippers consult him about their diseased cattle and hand him rice, which he looks at and then declares whether the cattle will recover. The rice is thrown into the cattle-shed in the belief that it will serve as a charm. The legend about Bīr Kuar is that he was an Ahīr, whose sister was a great witch. This witch taught many young girls the mystic art, the place of rendezvous being near a pool in a forest at dead of night. The participants in the witch's revels had to divest themselves of their clothing, and Bīr Kuar coming on them one night took away all the clothes. His sister, ashamed to come out naked, then changed herself into a tigress and began killing all the Ahīrs' cattle. In despair, the Ahīrs appealed to Bīr Kuar, each promising him a horse if he freed them from the tigress. One night, when he was sleeping among his buffaloes, the demon tigress came out and tried to kill him, but the buffaloes were so devoted to him that they formed a circle round the tigress and killed her. Ever after that the Ahīrs had peace, but when called upon to fulfil their promises, they refused to do so and compromised by each offering Bīr Kuar a clay horse. This, it is said, is the reason why to this day heaps of little earthen-ware horses may be seen at the foot of every shrine of Bīr Kuar, who protects the cattle from the attacks of tigers.

The Kharwārs, who number 41,925, are the most numerous caste after the Ahīrs. They are known locally as Kherwārs, and are also called the Athārahazār or Eighteen-thousand, just as the Cheros are known as the Bārahazār or Twelve-thousand, in commemoration of the fact that when Bhagwat Rai conquered Palāmau the invading army consisted of Kharwārs and Cheros in these proportions. They are clearly of aboriginal descent, the lowest among them being of a Dravidian type, very dark with thick protuberant lips and projecting cheek bones. Indolent and extravagant, they have lost most of the *jāgīrs* which they once possessed and have been reduced to the position of cultivators. Owing to their negligence and sloth, it appears likely that they will be pushed further and further back as cultivation advances. Kharwārs.

They are inordinately proud of the traditions of their former greatness, and this pride has helped in their downfall, as they are continually hugging the idea that they are, or were, a great people, and make little or no attempt at improvement or progress; most of them follow the plough, but none of them will carry loads upon their heads, like others who perform *begār*, considering it derogatory. Socially they are kind and warm-hearted, but are prone to brood over real or imaginary wrongs; and though slow to anger, are very fierce when aroused.

The Kharwārs now rank among Hindus and employ Brahmans, but many of the ancient forms of worship remain, and the belief in witchcraft and the power of evil spirits is as strong as among the less civilized aboriginal tribes. They appear to recognize vaguely the existence of a Supreme Being, whom they call by the Hindu name of Parameswar; but the really popular deities are various godlings and evil spirits, such as Chandra Rai, a deified Korwā, Chattar Rai, originally a warrior who fell in battle, Goraiyā, who is regarded as a deified Kharwār, Hankarmal, an old Rājput king who was slain by an usurper, Mehtarpalhat, a deified Bhāt, Purbiā, primarily a godling of the Bhuiyās, Chandī, etc. The worship of these deities is generally of the same type, the officiating priest being a Kharwār Baigā and the commonest offering being a goat—preferably a black he-goat—which is first made to eat some rice and then decapitated. The Kharwārs, like all the aboriginal tribes, are very superstitious, and people the jungles and hills with spirits, to whom they offer sacrifices at certain times of the year.

One of the most remarkable of these spirits is Muchuk Rānī, also known after the name of the *tappā* which contains her home, as Durjagiā Deotā; this home or *naihar* is on a hill called Bahurāj situated in the Government village of Juruāhar. All Kharwārs regard her with great veneration and make sacrifices to her several times during the year; but the most curious ceremony is the triennial marriage of the Rānī. On the bridal day the whole of the two villages of Juruāhar and Ukkāmānd ascend the hill singing a wild song in honour of the bride and bridegroom. One of the party is constituted the priest, and ascends the hill in front of the procession, shouting and dancing till he works himself into a frenzy. The procession halts at the mouth of a cave on the top of the hill, and the priest then goes inside and returns bringing with him the Rānī, who is represented by a small oblong-shaped stone daubed over with vermilion. A piece of tusser silk cloth is placed on the Rānī's head; and a new *dohar* or sheet is placed below her, the four corners being tied together in such a manner

as to allow the Rānī, who is now supposed to be seated in her bridal coach, to be slung on a bamboo and carried by two men, as in a palanquin. The procession then descends the hill and halts beneath a banyan tree in Juruāhar till noon, when the marriage procession starts for the home of the bridegroom, who resides in the opposite range on the Kāndi hill in Ukkāmānd village. On their arrival there, various offerings are presented to the bride; she is then taken out of her palanquin and put into the cave in which the bridegroom, who belongs to the Agariā caste, resides. This cave is supposed to be of immense depth, for the stone goes rolling down, striking the rocks as it falls, and the people all listen eagerly till the sound dies away, which they say, it does not do for nearly half an hour. When all is silent, the people return rejoicing down the hill, and finish off the evening with a dance.

The Bhogtās were treated as a separate caste at the last census, but there seems to be little doubt that in this district they are merely a sub-caste of Kharwārs. Altogether 18,665 persons were returned as Bhogtās, and of these no less than 18,229 were residents of the Bālumāth thāna, where they are usually labourers and cultivators. **Bhogtās.**

The Kahārs, who number 28,892, are in greatest strength in the north of the district. They are good cultivators and are also employed as domestic servants and *pālki*-bearers. The men have acquired an evil reputation for stealing and the women for immorality; it is a local saying that a Kahār with one daughter only works half a day, and one with two daughters not at all. **Kahārs.**

The Dosādhs (28,830) are to be found in almost every village, either as cultivators or watchmen. There are some wealthy and respectable families among them, but the greater portion are too indolent to accumulate wealth by honest industry, and have the character of being inveterate thieves. **Dosādhs.**

The Chamārs (28,640) are the tanners of the district, whose duty it is to keep the cultivators' ploughs supplied with the rude thongs attached to the yokes and to supply the zamīndārs and villagers with a certain number of shoes every year. The hides of cattle dying in the village are their traditional perquisite, and they are frequently suspected, not without good cause, of poisoning cattle for the sake of their skins. Their womenfolk are the village midwives. **Chamārs.**

The Brāhmans (27,968) are, as a rule, well-to-do cultivators. Formerly they held many estates granted them as *jāgīr* or rent-free properties by the former chiefs and landed proprietors, but these estates have now been subdivided into minute shares, and **Brāhmans.**

as a class they are no longer wealthy landlords. Living among a population consisting largely of aboriginal tribes, the Brāhmans of Palāmau, who probably first came into the district as the priests of the Raksel Rājputs, are a very ignorant set. There are few learned men among them, and though most act as *gurus* and *purohits*, few have any knowledge of the Sāstras or can read or write. Physically, they are fine, well-made men and show some of the finest specimens of manhood to be found in the district. They are said to be very quarrelsome and to make troublesome tenants and bad landlords.

Rājputs. The Rājputs (26,339) are the only other caste numbering over 25,000. Though not very numerous, this is the most influential caste in the district, as most of the wealthiest zamīndārs belong to it. The most influential Rājputs are the Nāmudāg family, who are Sarwār Rājputs, and are usually appealed to in caste dissensions. The Thākurais of Rankā and Chainpur are also Sarwārs, and are descended from the family of Dīwāns or chief ministerial officers under the old Chero rulers. The heads of both these families did good service in the Mutiny and received from Government the title of Rai Bahādur, besides *khilats* or dresses of honour and rent-free lands. The Rājputs of Palāmau have intermarried freely with the Cheros and Kharwārs, and some undoubtedly have a large strain of aboriginal blood.

ABORIGINAL RACES. The purely aboriginal tribes muster strong in the south of Palāmau, which adjoins the aboriginal territory of Chotā Nāgpur proper and Sirguja, and their number gradually decreases towards the north. The majority have settled habits of life and live in small villages in the jungle, or when working as herdsmen and labourers, in separate hamlets (*tolās*) dependent on the larger villages inhabited by their Hindu masters. Some, however, still pursue the same nomadic life as their forefathers, living on wild herbs and roots and the produce of the chase, while others, little less nomadic in habit, grow a few hardy crops by a very rude system of agriculture; they use neither plough nor hoe, but merely drop different seeds in small holes made with a sharp pointed bamboo, reaping the crops as they come up in turn.

Orāons. The Orāons are the largest of these aboriginal races, numbering 21,930, of whom two-thirds are found in the three southern thānas of Mahuādānr, Lātehār and Bālumāth. The Orāons of Palāmau may be divided into two distinct sections, viz., those who have been settled in the district for generations past, and those who have recently emigrated from Chotā Nāgpur, or reside in the south on the borders of the plateau. There is a marked distinction between the two, which tends to show that the Orāons degenerate

after a long residence in the plains. The first section, who reside in the valleys of the Koel and the Amānat, have now lost many of the characteristics which separate the true Orāon from the other jungle tribes. They have very little of the appearance of the Orāon that one meets on the top of the Rānchī plateau, and can with difficulty be distinguished from the Bhuiyās. They have given up most of the ancient customs of the tribe, and their dwellings are the same as those of the Bhuiyās and other castes.

The Orāons to the south, who are said to be the most cheerful and light-hearted race in Palāmau, have the physical appearance and retain, to a large extent, the religious observances of the pure Orāons of Chotā Nāgpur. They have dark and, in some cases, almost black complexions, and rather round faces with broad flat noses, projecting jaws, and low foreheads. They believe in a Supreme Being whom they call Dharmes, *i.e.*, the beneficent one. He is regarded as their creator, but he has given the management of the world into the hands of tutelary divinities and of *bhūts* or devils, whom they have to propitiate. The Baigā or Pāhān is in charge of these tutelary divinities, and officiates at the chief feasts on behalf of the whole community; while the Ojhā or sorcerer is in charge of the *bhūts* or devils and has to find them out or drive them away. These divinities and devils are free to act as they please, and Dharmes does not interfere with them. But the Orāons invoke him in their greatest difficulties, especially when they have had recourse to the Pāhān, the Ojhā and the Sokhā or witch-finder, and found them powerless to help them. Then they turn to Dharmes, and sacrifice a white cock with the invocation "Dharmes, you are our creator. Have mercy upon us." One curious spirit believed in by the Orāons is Murkuri or the thumping *bhūt*. "Europeans to show their kindness and familiarity thump people on the back. If this is followed by fever or any kind of sickness, it will be ascribed to the passing of Murkuri from the body of the European into the body of the native." *

The Cheros number 15,293, and over four-fifths are found in the Daltonganj, Lātehār and Pātan thānas. They are subdivided into 2 sub-castes, Bārahazār and Terahazār or Bīrbandhi. The former is the higher in rank and includes some of the descendants of the old ruling houses of Palāmau, who assume the title of Bābuān; but the wealthier families among them and the Terahazār Cheros have married into local Rājput families, and now call themselves Chauhān Rājputs. Once the lords of Palāmau, the Cheros have never forgotten that they were a great people, and that their descent is an Cheros.

* The Revd. P. Dehon, S.J., *Religion and Customs of the Urāons*, Memoirs, A. S. B., Vol. I, 1906.

honourable one. Only the poorest among them will hold the plough, and none of them will carry loads upon their heads. They are extravagant and fond of display, and will run irrecoverably into debt, so long as they have the smallest fraction of an estate left to give as security; and the result is that one by one the Cheros have almost all lost their estates.

The distinctive physical traits of the Cheros have been considerably softened by their alliances with pure Hindu families, which their ancient power and large possessions enabled them to secure; but they appear still to exhibit an unmistakable Dravidian physiognomy. They vary in colour, but are usually of a light brown. They have, as a rule, high cheekbones, small eyes obliquely set, and eyebrows to correspond, low broad noses, and large mouths with protuberant lips. The religion of the Cheros is still in a state of transition, and they observe a sort of dual worship, which discloses unmistakable traces of their non-Aryan descent. For the worship of the Hindu gods they employ Kanaujiā or Sākadwīpī Brāhmans, who are received on terms of equality by other members of the sacred order; and their spiritual guides (*gurus*) are either Brāhmans or Gharbāri Gosains. But they also reverence Animistic deities of the type known to other aboriginal tribes, to whom goats, fowls, sweet-meats, and wine are offered in the month of Aghan, so as to secure a good harvest. In these sacrifices Brāhmans take no part, and they are conducted by a priest (Baigā) belonging to one of the aboriginal races.

Korwās. The Korwās (9,394) are found almost entirely in the Rankā and Pātan thānas, and are most numerous in the former thāna which lies on the borders of Sīrguja. They are described as follows by Mr. Forbes:—"In appearance they have a greater resemblance to the African negro than any of the Mundā tribes—round faces, very black skins, large mouths, very thick lips, and broad flat noses. They are short, thick-set men, with deep chests and broad shoulders, giving the idea of great power; at the same time, they are exceedingly active. Like all wild tribes, they are very poor cultivators, and grow none but the hardiest of crops. They love a forest life, and subsist upon wild herbs and roots and the produce of the chase. They are very keen hunters, and spend half their time in the forest. A Korwā equipped for the chase is the very type of a savage. I have frequently come across them both singly and in parties of ten or twelve, armed with bows and arrows, with small bright axes in their waists, stealing quietly through the jungle, tracking down the deer." One of the most pleasing traits of the unspoilt Korwā is his marvellous truthfulness. One of them when on trial has been known to acknowledge

stolidly 15 dacoities, three or four accompanied by murder, and deny indignantly a sixteenth, feeling the unmerited charge most keenly.

The Mundās number 9,607, of whom 9,000 are found in the Bālumāth thāna, in the south-east of the district. They are an offshoot of the well-known Mundā tribe of the Chotā Nāgpur plateau, and no special account of them is required. **Mundās.**

A certain number of them in the Chhechhāri valley are known as Bhuinhārs, sometimes written as Bhuniyars, of whom the following account is given by Father Dehon in an article, "The Religion and Customs of the Urāons," published in the Memoirs of the Asiatic Society of Bengal, vol. I, 1906:— **Bhuinhārs.** "The Bhuniyars were the first settlers in Barwe, Chhechhāri and Sirguja, hence their name Bhuniyars, which means first settlers. Look at the map of Chotā Nāgpur, and it will be seen that Barwe, Chhechhāri and Sirguja are separated from the country first occupied by the Mundās and Orāons by a chain of hills and *pāts* running from Palāmau to Pālkot. Well, these Bhuniyars are only the descendants of a few Mundās who had crossed the hills and settled in Barwe and Chhechhāri. This is proved by their similar traditions, the tombstones which are exactly the same as those of the Mundās, the similarity of their customs, and the names of some villages. Is it not very likely that, as the Orāons increased in number, they spread from the side of Lohārdagā towards Pālkot, whilst the Mundās retreated and left their brethren of Barwe and Chhechhāri separated from the main body? By degrees also the Orāons emigrated from Kukra, crossed the mountain and came to settle in Chhechhāri and Barwe, where the same process takes place. The Orāons take possession of the lowlands, whilst the Mundās retire to the small plateaus or high lands on the mountains. Colonel Dalton speaks of the Bhuniyars as being a different race and does not know how to classify them; but for one who has lived a long time among them there is no doubt at all. Some old men of Barwe still remember that when they were young, their fathers were still in communication with the Mundās of Nāgpur. The Bhuniyars of Sirguja being the farthest away from the Mundās are known only by that name. In Chhechhāri is the transition stage, and they are called Bhuniyars or Mundās indifferently, whilst in Barwe, where they are the nearest to the old stock, they will only accept the name of Mundā. Now that their relations with the Mundās have ceased and they have lost their language, and have moreover abandoned the local traditions and gods of the Mundās, they are likely to form a different caste. Up till now they affirm that

when they go to Nāgpur and explain everything to their *bhais*, they are looked upon as being of the same caste; but they do not intermarry."

Parhaiyās. The Parhaiyās (7,277) are the remnant of a tribe who, according to their own tradition and the traditions of other races in the district, once formed an important section of the population. Some of their songs are evidently old war songs of the tribe, and one referring to the invasion of Palāmau has a burden of "Fly, fly, Deo Sāhi is coming, and we cannot resist him"; this Deo Sāhi was the father of Pūran Mal, one of the leaders of the invading force. At the present day, many of the Parhaiyās are to be found residing in the plains, but they generally choose the more jungly villages, and reside in a separate *tolā* or hamlet. Some are good cultivators; but the majority live in the hill ranges and roam about from spur to spur, clearing small patches of ground, on which they cultivate a few hardy crops, and bringing down to the plains honey, bees-wax, lac, and other jungle produce, to barter for grain, salt, tobacco and cloth.

Nagesiās. The Nagesiās, who number 5,115, are found chiefly in the Mahuādānr thāna, which contains 3,957 members of the tribe. They are also called Kisān, a word meaning merely a tiller of the soil, and it has been conjectured that the tribe acquired that name from devoting themselves peculiarly to cultivation. They are a simple light-hearted race, who are denizens of the jungle or cultivate the skirts of the forests. They are said to be sturdy, industrious cultivators, extremely averse to service and any form of menial labour, beyond ploughing the fields or cutting the crops for another peasant.

Birjias. The Birjias are another Dravidian tribe and have only 1,168 representatives in the district; of these 1,054 are inhabitants of the Mahuādānr thāna. A few have entered the villages of the level valleys in the south and have become cultivators; but the bulk live in groups of two or three families on the spurs of the highest hills. By cutting the forest and burning the underwood, they clear a small space of ground on the top of the spur, where they have fixed their home for the year. On this land they cultivate a few scanty crops, which barely supply their wants. They use neither plough nor hoe, but plant their seed in small holes drilled with a pointed bamboo. They are a jungly tribe, roaming from hill to hill, and supplementing their crops by roots, herbs, and other jungle products, which they barter for the grain, salt and tobacco of the lowlands.

SOCIAL LIFE. In appearance the villages resemble those found in the plains of South Bihār and in the Chotā Nāgpur plateau. The houses,

which are almost invariably built of mud and roofed with red tiles or thatched with grass, are huddled together without any order or arrangement; and except in those villages which boast of a bazar, no two houses adjoin. There is, however, a marked difference between the houses of the aboriginal tribes and those belonging to persons of Aryan descent. In the latter case the homestead has a neat comfortable appearance, and all its surroundings are in good order, while the former are slovenly and ill kept, the house being badly tiled or thatched, and the fences half broken down. Villages and houses.

The following description of an ordinary Orāon village, given by Father Dehon, in the article quoted above, will apply to most of the aboriginal colonies:—"In some parts of the country the Orāons live in large villages consisting of 100 and even 200 houses. These are huddled together in the most perfect disorder: there are no thoroughfares, but only small little bits of winding and crooked paths—a most perfect labyrinth leading you to an infinite series of *cul-de-sacs*, each one more puzzling than the last. A European who finds himself in one of these mazes would find it impossible to get out of it without a guide. Nothing more monstrously filthy can be imagined than one of these villages in the rainy season. As it is impossible to dig any ditch in such a disorderly heap of houses, the rain collects and forms stagnant pools. The cattle, the pigs (every Orāon must keep five or six pigs) have very soon made a perfect quagmire, through which everyone has to wade knee-deep. Imagine the sink of filth this must be, and what a mixture of nose-offending matter gets accumulated in four months. But the pigs and the children delight in it; and you can see them wallowing together side by side in perfect harmony.

"The houses are very small and low, most of them consisting of four mud walls, 15 feet long, 7 feet high, and 6 feet broad, surmounted by a thatched roof. In the middle of one of these walls there is a hole 4½ feet high, which is the door; it is level with the ground, whilst on both sides there is a raised but hollow verandah, under which a whole family of pigs are always fighting and screaming. Inside, the *logis* is divided into three parts: on one side the bullocks and the goats, separated from the middle room by three bamboos put horizontally and resting on one side in the wall and, on the other side, attached to a pole. Near the pole there is a small door of trellised bamboos. On the other side is the granary, and a place for pots and pans and all kinds of utensils, where they lie heaped up together. In the middle is a small room left for the people to sit in and prepare their food. There are generally three *chulhās* or hearths. No Government in

the time of any epidemic ever invented a more perfect system of fumigation. The *chulhās* are lighted with half-dried wood, the water is boiling, there is no chimney, no hole except the door, and the smoke and steam soon entirely fill the whole compartment. Natives themselves choke and cough, and bitter tears roll down their cheeks. As for a European, it would be death by suffocation if he had to remain half an hour in it. Added to all this is the stench of goats and the smell of cows and dirty men blending together, and you will have an idea of the ordeal through which the nostrils have to pass. The entrance is closed by two big revolving planks roughly hewn out of the trunk of a tree. They are a most heavy and unwieldy concern, too, to the fingers that are caught between them, when with a screech and a bang they come together. On the upper part you have a similar plank to support the wall above the door. This is called the *kaparphora*, *i.e.*, the forehead-breaker. Never was a name so well applied. The natives themselves are not in danger of breaking their heads, simply on account of their hardness, but for a European who would deem it polite to go in bare-headed his fate would be sealed. As for the missionary, who has often to go and visit his people in time of sickness, his dilapidated *topi* bears witness to the numerous encounters it has had with the famous *kaparphora*."

In more civilized villages the residence belonging to each family consists generally of four houses, built so as to form a square with a quadrangle in the centre. This interior quadrangle is called the *āngan* or yard; round it are the four houses above mentioned, in which the different members of the family reside. Each house has a verandah, and consists of two or more rooms, according to the means and status of the occupants; one is generally set aside as a store-house or granary. Sometimes, when the family is a large one and in comfortable circumstances, there are two court-yards, and the principal house, facing the street, is of more pretending proportions. It has an upper story, and there is a broad verandah in front.

The above is a description of the dwellings of the better class of cultivators and of the petty landlords and farmers. The dwellings of the poorer classes are of an humbler description, and are built either of mud or of wattle and dab. They consist sometimes of one and sometimes of two houses facing each other and walled in on each side with a bamboo fence to form a court-yard; they are generally surrounded by a high bamboo paling, on which various creepers are grown; this enclosure is called the *bāri* or homestead land.

The dwellings of the chief landed proprietors generally consist of a huge pile built of mud and tiled. The plan is that common to most Indian country houses, and consists of two or more quadrangles, one of which is set apart for the ladies of the establishment. Most of the older mansions are built upon the remains of an ancient *garh* or fort erected by the founder of the family, and are still surrounded by a moist or dry ditch, which is now used as a depository for all the rubbish and filth of the village. Some of the wealthier families have improved their residences by the addition of tall brick houses, built at different periods, after the native style and without any uniformity; and this combination gives an unique and often picturesque appearance to the building, particularly when built among tall trees with fine foliage. The house is generally situated in the centre of the village or little town bearing the name of the estate, and from its elevated position is a conspicuous feature in the scene. Most of the houses round are occupied by the dependants and farm servants of the family, and there is generally a bazar in which a weekly market is held.

Many curious customs and superstitions prevail among all classes and castes regarding the building of their houses. No Hindu, be he landlord or peasant, would dream of erecting a square house. It must be oblong, and the two longer sides must run north and south; the owners cannot, however, assign any reason for this. Before proceeding to build, the Brāhman or Ojhā must be consulted to ascertain the proper day on which to commence laying the foundations, and to state whether the site chosen is a lucky one or not. The Kharwārs and jungle tribes follow to a certain extent the custom of the Kols, or something like it, *i.e.*, they place 21 grains of paddy on the spot selected over-night and return in the morning to ascertain the result. If the grain has been disturbed or attacked by white-ants during the night, the spot is abandoned as unlucky; if untouched the building is commenced, and when completed, a house warming is given to friends, and the family enter into possession.

Furniture.

The ordinary articles of domestic furniture comprise a string bed or two, made by the village carpenter, one or two iron frying pans, an iron ladle, and a knife used for cutting up vegetables. Water is generally kept and carried in the ordinary earthen vessels called *gharās*, and only the better class of cultivators own brass water vessels. Next to cattle, the possession of brass dishes is a token of wealth. These brass dishes are much valued both for their intrinsic worth, and for the ease with which they are stowed away. Many families own vessels which have been handed

down through successive generations; only those required for daily use are kept above ground, the remainder being buried and only produced on state occasions. What treasure the family possesses is often deposited in these vessels and buried with them. The system of burying treasure is common to all classes. The spot selected is known only to the heads of the family: sometimes it is in the floor of the house, sometimes in the walls of the different buildings; many families have a custom of hiding their wealth in some cave or under some rock on the nearest hill The exact spot is known only to the parents, who rarely inform the children until they are at the point of death; and it frequently happens that a man who is known to be possessed of considerable wealth is carried off without having had time to communicate the spot to his heirs.

Dress. The Hindus of Palāmau, including such Hinduized tribes as the Cheros and the Kharwārs, dress themselves like their neighbours in Bihār. The apparel of a Hindu of average means consists a *dhotī* or waist cloth wrapped round the loins and falling over the legs as far as the knees, a *chadar* or *dohar* of cotton, which serves as a covering for the upper part of the body, and a pair of country-made shoes; a *jāmā* or coat and a turban or *pagrī* are also worn on special occasions. The poorer people ordinarily wear a *kopin* or *bhāgwān*, which is a narrow piece of country cloth about 3 feet long and a few inches broad, costing about 4 pice. It is passed between the thighs and attached in front and behind to strings worn round the waist. The women of the superior Hindu castes wear *sārīs*; but those of the lower castes and the aboriginal tribes wear the *khaurhiā*, which is a garment composed of two long strips of cloth sewn by their edges along the middle, and fringed with red or occasionally black and blue threads.

Food. The food of the people consists for the most part of rice, maize, *maruā* (Eleusine Coracana), wheat and barley. Rice, which is the staple food of the people in Bengal, is not the staple food of the poor in this district but rather that of the well-to-do. The majority live on maize and the various *bhadoi* and *rabi* crops, such as *maruā* and other millets, like *gondli*, *sāwān*, *chīna* and *kodo*, cereals and pulses like wheat, barley, gram, and occasionally peas, lintels and *khesāri*. For the most part they eat these in the form of *sattu*, *i.e.*, a flour prepared from wheat or one of the many kinds of coarse grains and pulses, the meal being accompanied by vegetables, salt and a few simple condiments.

The proportion in which the various grains enter into the dietary of the people differs very greatly. In the north, where the population is mainly Hindu, and the alluvial plains formed

by the Son, Koel and Amānat are under paddy or *rabi* cultivation, rice is largely consumed, besides *maruā*, wheat, barley and gram. The hilly tracts, which form the remainder of the district, are mainly inhabited by semi-Hinduized aboriginal tribes, who cultivate little rice and even less *rabi*. Here *bhadoi* crops, such as maize, *maruā* and to a smaller extent *sāwān* and *kodo*, are extensively grown and consumed, while rice, wheat and barley are of minor importance.

In addition to these food-grains, the inhabitants in the wilder parts resort largely to the use of edible forest products to supplement their food-supply. The most important of these products is the corolla of the flower of the *mahuā* tree, which is met with in all parts of the district, growing in equal profusion in cultivated and forest tracts. The flower is in season in March and April, when it is gathered in large quantities, as it falls ripe from the tree, by the women and children; and after being sun-dried, is usually prepared for food by boiling. The seeds of the *sāl* tree, the fruit of the banyan and *pīpal*, wild yams, the *bhelwā* or fruit of the Semecarpus Anacardium, the *piār* (Buchanania latifolia), the *bair* (Zizyphus Jujuba), and a large variety of other jungle fruits and roots are also eaten cooked or raw, and form a very important addition to the ordinary food supply of the poorer classes.

CHAPTER IV.

PUBLIC HEALTH.

VITAL STATISTICS.

UNDER the system introduced in 1892, all births and deaths that take place are reported by the *chaukīdārs* to the police, and the latter submit monthly returns to the Civil Surgeon, by whom statistics for the whole district are prepared. Doubt has often been thrown upon the accuracy of the statistics thus obtained through the agency of the village *chaukīdār*, and it is beyond question that the diseases to which death is ascribed are often incorrectly stated, for the *chaukīdār* has no medical knowledge and indiscriminately classes a number of deaths under the general heads of fever, cholera, etc. But in Palāmau it is noticeable that the result of the last census was to shew the general accuracy of the returns giving the total number of vital occurrences. These returns indicated an excess of births over deaths aggregating 21,099 during the decade ending in 1900, and this corresponded very closely with the statistics of the census, which shewed an increase of 22,830 persons.

Since that time the population has grown very greatly, the excess of births over deaths in the 6 years ending in 1906 being altogether 75,165 or more than three-fold the increase observed during the preceding decade. In each of the last three years the birth-rate was the highest recorded in Bengal, being no less than 56·81 per mille in 1904, 51·33 in 1905 and 55·06 in 1906. The growth of population has been particularly marked in Rankā thāna, which returned a birth-rate of 65·62 and 59·88 per mille in the first 2 years and of over 60 per mille in 1906, and in Chattarpur, where the corresponding figures were 66·77, 56·07 and 58·63 per mille.

The lowest birth-rate recorded since the district was constituted was in 1892, when it was 30·34 per mille; and the highest is 56·81 per mille recorded in 1904. The highest death-rate is 47·87 per mille returned in 1900, a year of distress, in which fever was very prevalent and there was a severe epidemic of cholera; and the lowest death-rate is 27·22 per mille, recorded in 1898, when the people were recovering from the famine of 1897.

Of all the diseases met with in the district fever causes the greatest mortality. The death-rate attributed to it has never fallen below 20 per mille since the formation of the district, and it has been known to rise as high as 32·72 per mille in 1900. Even allowing for the element of error due to the want of medical knowledge on the part of the reporting agency, which causes the *chaukīdār* to regard fever as a general cause of death, there is little doubt that fever is really responsible for the greater number of the deaths every year, and that in many cases these are caused by malarial affections. This is particularly the case in the tract south-west of the Daltonganj-Rānchī road, where the people are infested with malaria. The following account of the different types of fever met with has been prepared from a note supplied by a former Civil Surgeon, Bābu R. C. Mozumdār.

PRINCIPAL DISEASES.

Fever.

Daltonganj, the headquarters of the district, is fairly healthy, except in the rainy season, when cases of malaria are observed; but in some of the rural areas malaria is very prevalent with enlargement of the spleen and liver. Of the different types of malaria, ague, quotidian, quartan and tertian are the most common; double types are rarely observed. The dispensary records shew that the highest temperature reached is 106,° and that the pulse, though very rapid, never exceeds 130. Enlargement of the spleen is felt within the second week of the fever; and under quinine treatment, the fever rapidly disappears when there are no complications. Remittent fever is occasionally observed in different forms, such as malarial, non-malarial and typho-malarial or bilious remittent. Malarial remittent fever is not fundamentally different from an intermittent fever, being merely due to the coalescence of attacks with absence of the usual intermission. Such a fever lasts for a short time, and is now and then attended with hyperpyrexia, delirium and coma.

Two varieties of non-malarial remittent fever are found. One is a continued fever with low temperature ranging from 99° F. to 101° F., which persists for weeks without being relieved by quinine. In the second variety the temperature is high, ranging from 101° F. to 105° F., the liver is invariably congested, and quinine treatment does no good. The fever invariably subsides on the 14th, 18th or 21st day or later, and relapses are not uncommon. Some enlargement of the spleen and anæmia persist for some time. True typhoid fever is rare. In some instances bilious diarrhœa persists in cases of remittent fever with some typhoid symptoms.

Simple continued fever or ephemeral fever, due to indiscretion in eating or drinking and to exposure to the heat of the sun or

cold, is met with, and hyperpyrexia due to sunstroke is not uncommon. Cases of *nâshâ* fever also occur. There is febrile disturbance lasting for 3 or 4 days with congestion of the nasal mucous membrane either of one nostril or of both nostrils. Injection of cold water into the nostrils and pricking the inflamed nostril are the modes of treatment adopted. Influenza of a mild type is occasionally prevalent, the principal symptoms being low fever and catarrh, lasting for a short time. Acute rheumatism with joint troubles, hyperpyrexia and heart complication are not uncommonly met with. Diphtheria occasionally prevails among children during the cold weather. Chicken-pox and measles are very common at the latter part of the cold weather and at the beginning of the hot season.

Cholera.

From the records of the district it appears that epidemics of cholera occur every second or third year, serious outbreaks having occurred in 1892, 1894, 1897, 1900, 1903 and 1907. The worst of these epidemics was in 1894, when the death-rate caused by the disease rose to the unprecedented figure of 11·16 per mille. The area affected in that year was, it is said, too scattered to be efficiently dealt with; the superstition of the people, their habit of flying into the jungle on an outbreak occurring, and their dislike and mistrust of European medicines, made it a hopeless task to cope effectively with the disease; while the *chaukīdārs*, naturally enough, fled with the other villagers, and returning only when it was considered safe, reported the outbreak of the occurrence only after it was over. Every effort was made to afford medical aid; but the result was that while the total number of deaths from the disease amounted to 6,665, the number who obtained medical aid was only 476. Besides these epidemics, there are sporadic and local outbreaks of the disease almost every year in the hot weather.

Water-supply.

The conditions favouring the spread of the disease, remarks a former Civil Surgeon, "are only too patent—filthy, sodden villages, and a water-supply polluted in every possible way, the latter evil being specially intensified by deficiency of rain for a long time before. The weekly bazars held in large villages, bringing a large concourse of people together, contribute to its spread." The usual source of the drinking water-supply in the hot weather in the villages to the south is the *dhāni* or common village spring. It is a tiny square hole, usually about 2 feet square, sunk in one of the lower terraces of a set of rice fields constructed in the bed of a ravine. This hole is kept from falling in by alternate layers of planks. Often there is only one such *dhāni* for the whole village, and it is used by both cattle

and men, while the rice fields themselves are contaminated by the droppings of cattle which find their best grazing there. No more polluted source of water-supply can well be imagined.

Bowel complaints, dysentery and diarrhœa are common, owing to the same causes as those mentioned above and to the fact that in the hot weather the water-supply is scanty and becomes impure, while in the rains the hill streams, from which a number of persons obtain their water-supply, bring down surface washings charged with various impurities. Another fertile source of bowel complaints is the indigestible food eaten by the people. Bowel complaints.

Plague first broke out in the district in 1901, when there were 168 deaths. In 1902 and 1904 only a few imported cases were noticed, and in 1903 no cases occurred. In 1905 the disease took an epidemic form and was prevalent in the headquarters of the district, as well as in some of the rural areas, continuing till the middle of May 1906. The bubonic type mostly prevailed; septicœmic and pneumonic types being rarely observed. Up to the present, this terrible scourge has not obtained a firm footing in the district, the total number of fatal cases up to the end of 1906 being only 800. This immunity is doubtless largely due to the fact that the people, accustomed as they are to nomadic ways, evacuate their villages on the first appearance of plague. Plague.

Among other common diseases may be mentioned spleen, ear and eye diseases, rheumatic affections, venereal diseases, ulcers, diseases of the respiratory system, and skin diseases. The glare and dust accompanying the hot dry climate of Palāmau appear to predispose to cataract, and blindness is unusually common, no less than 140 out of every 100,000 males and 145 out of every 100,000 females being returned as blind at the census of 1901, as compared with the Provincial average of 95 males and 85 females. Other diseases and infirmities.

Vaccination is compulsory only within the municipal area of Daltonganj, and, to judge from the annual statistics, is not so popular among the people as in other districts of Chotā Nāgpur, though steady progress has been made in recent years. In 1905-06 the number of persons successfully vaccinated was 16,210, representing 26·41 per mille of the population, and the average annual number of successful operations in the preceding 5 years was 15,564 or 25·35 per mille; these proportions are lower than in any other district in the Division and are much lower than the corresponding averages for the Province (35·88 and 31·14 per mille). On the other hand, Palāmau has one of the best records in Bengal for the protection afforded to infants, 730·9 per mille being successfully vaccinated in 1905-06, and 775·6 per mille in 1904-05, VACCINATION.

in the former year only two districts, and in the latter year one, shewed better results. Serious epidemics of small-pox are rare; only thrice since the formation of the district has the death-rate from this disease exceeded 1 per mille, and it has never been as high as 2 per mille.

MEDICAL INSTITUTIONS.

There is one hospital in the district situated in Daltonganj and four dispensaries under State control situated at Garhwā, Haidārnagar, Lātehār and Rankā. The hospital at Daltonganj was established in 1867, and this was the only medical institution in the district till 1896, when a dispensary was started at Rankā, thanks to the liberality of Rājā Govind Parshād Singh, at whose expense it is maintained. The dispensaries at Garhwā and Lātehār were subsequently opened in 1902. The Daltonganj Hospital contains 14 beds for male and 6 beds for female patients, and the dispensary at Garhwā 3 beds for male and 1 bed for female patients; the other dispensaries afford out-door relief only. The marginal statement sufficiently shews the increasing popularity of the medical relief afforded.

YEARS.	AVERAGE ANNUAL NUMBER TREATED.		
	In-patients.	Out-patients.	Total.
1890-94 ...	108	3,069	3,177
1895-99 ...	246	5,178	5,424
1900-04 ...	335	10,090	10,425
1905 ...	303	10,185	10,488

Besides these public medical institutions, there are a railway dispensary and a police hospital at Daltonganj, and a private dispensary attached to the colliery at Rajharā, which contains 8 beds.

CHAPTER V.

FORESTS.

THE Government forests in Palāmau extend over 259 square miles, viz., 188 square miles of reserved forests and 71 square miles of protected forests, or one-nineteenth of the total area of the district.

RESERVED FORESTS.

The reserved forests are situated in the more hilly parts of the district at an elevation varying from 1,000 to 3,500 feet, but also include considerable areas of level or slightly undulating ground. They may be divided into 4 areas, viz., *sāl* areas extending over 102½ square miles, *khair* (10 square miles), upper or hill mixed forests (72½ square miles), and blanks (3 square miles). In many parts of the first area *sāl* (Shorea robusta) is found almost pure, whilst in other parts it is mixed with other species, such as *āsan* (Terminalia tomentosa), *piār* (Buchanania latifolia), *aurā* (Phyllanthus emblica), *dhauthā* (Anogeissus latifolia), *sidhā* (Lagerstrœmia parviflora), *kankar* (Zizyphus xylopyra), and *biri* (Casearia tomentosa). *Sāl* usually occupies the depressions and lower slopes, and is mainly represented by groups of coppice poles, 1 foot or 2 feet in girth, forming a slightly interrupted canopy; but in some localities it occupies the crests of ridges, and a small proportion of the poles are from 2 feet to rather over 3 feet in girth, whilst trees of 4 feet to 7 feet in girth are found in depressions.

Khair (Acacia Catechu) occurs mostly in the plains, and it is only found in certain localities, principally where the system of shifting cultivation known as *jhūm* has been carried on or the original crop has been destroyed in other ways. It is usually mixed with a variety of inferior species, such as *bel* (Ægle Marmelos), Terminalia tomentosa, *mahuā* (Bassia latifolia), Anogeissus latifolia, *dheri* (Kydia calycina), Casearia tomentosa, Buchanania latifolia, etc.; the principal localities in which this type of crop is found are Kechki, Betlā, and round Kerh, but patches of it also occur in Kohbarwa, Labgarh, Bagochampā, Gangtar, Garanj and Tungāri. On the whole, the growth of *khair* is very poor.

The account of the reserved forests has been compiled mainly from reports by the Divisional Forest Officer, Mr. J. P. Haslett.

The hill or upper mixed forests contain a large variety of species, in which the following predominate:—*salai* (Boswellia thurifera), *galgal* or yellow cotton tree (Cochlospermum Gossypium), Anogeissus latifolia, Lagerstrœmia parviflora, ebony (Diospyros melanoxylon), satin wood (Chloroxylon Swietenia), Phyllanthus Emblica, Ægle Marmelos, *keonjhi* (Sterculia villosa) and *jingar* (Odina Wodier). Generally, the crop is composed of unsound or ill-formed trees, often of coppice origin; but some kinds of trees, such as ebony, and the young growth are, as a rule, promising. Ebony in places attains 2½ feet to 3 feet in girth, and satin wood trees of the same dimensions are also found. The largest tree is the *salai*, which ranges up to 6 feet and 7 feet in girth. Bamboos (Dendrocalamus strictus) are found almost throughout the mixed forests, in parts of which they are very abundant. They are also found in the *khair* areas, but are rare in the *sāl* areas. They appear to thrive best on rocky slopes.

Northern range.

The reserved forests are divided into 8 blocks, as shewn in the margin, the Bāresānr block, with an area of 89 square miles, constituting the southern range, and the other seven blocks, with a total area of 99 square miles, the northern range. The largest of the blocks in the latter range, the Saidup block, consists of hills, from the foot of which the ground slopes down in the direction of the various streams, which finally find their way into the Koel and Aurangā rivers. Here *sāl* is found forming almost a pure belt along the foot of the hills and up the cool shady ravines intersecting them. On the sides of the hills and on their summits, where the soil is poorer, *sāl* altogether ceases to exist and gives place to tree growth of a very varied character. In the Ramandāg block the conditions of soil, the configuration of the ground, and the nature of the tree growth are similar to those found in the Saidup block; and the growth is as variable, possibly owing to climatic influences, such as frost, which has affected the growth of *sāl* in the low-lying damp localities. There is a plentiful supply of bamboos in this forest, but little or no demand for them, and the difficult nature of the ground and the cost of the labour required for extracting them make exportation unprofitable.

Name.	Area in acres.
Bāresānr	56,951
Betlā	6,847
Kechki	440
Kumāndih	9,815
Oreā	698
Piri	1,523
Ramandāg	16,595
Saidup	27,520

The Betlā block in the same range contains large quantities of *khair* trees and bamboos of the Dendrocalamus strictus species

The greatest demand for bamboos is from this block, which is the only one in which any systematic method of working the forests for bamboos has been introduced. In the Kumāndih, Oreā and Piri blocks conditions as to soil, climate, configuration, etc., are much the same as in the Ramandāg and Saidup forests. *Sāl* is found in the lowlands, and much the same sort of growth in other parts as is described above. The last block in this range is the Kechki block, which comprises an area of less than a square mile at the junction of the Koel and Aurangā rivers, 10 miles from Daltonganj. The soil is poor and dry, and the surface is for the most part undulating and rocky. The growth consists mainly of *khair*, bamboos and grass. A portion of the southern boundary runs over the crests of one or two low-lying hills, along the slopes of which a narrow fringe of *sāl* can be observed.

It is interesting to note that in all these blocks the *sāl* tree appears to prefer the northern sides of the hill ranges, which chiefly run east and west. This would seem to be due to the shade that aspect enjoys throughout the cold weather, the soil being consequently damper and cooler than on the southern slopes, and retaining moisture much further into the cold weather.

Southern range. The forests of the Bāresānr block, which constitutes the southern range, form a compact area of 89 square miles, lying south of the Koel, the rest of the blocks described above being situated north of that river. The nature of the forests is similar to that found in the other blocks, but *sāl* is more plentiful in the western portion of this block, at Bāresānr, Māromānr, Netarhāt, and Rūd, and is healthier and of better growth and size. Dry and green *sāl* timber is exported from near Māromānr along the Kechki-Bāresānr road, which, though hilly, is practicable for cart traffic, and is sent to Daltonganj, a distance of about 40 miles; but the demand is limited. Bamboos are found near Bāresānr in large quantities and are scattered about in other parts of the block.

Administration. Forest conservation in Palāmau dates back to 1879, when 179 square miles of forest were reserved, the remaining forests being constituted reserves in 1884. Before July 1904 they formed a separate division, but since that date the charge has been combined with that of the forests in Hazāribāgh, the whole constituting the Palāmau Forest Division. The staff maintained in the Palāmau district in subordination to the Divisional Forest Officer consists of one Deputy Ranger, one Forester and 18 Forest Guards. Since the forests have been under the Forest Department, the system of management has been almost restricted to protective measures. Cutting of wood has been limited to the exploitation of unsound timber and a few

mature trees, cut chiefly in Bāresānr, and to the sale in Betlā of unsound *khair* trees for the manufacture of cutch. Such timber as is sold is conveyed to Daltonganj in carts and is thence forwarded to its destination by rail. Most of the bamboos exported are, after being carted to Kechki, rafted thence in the rains, but a small part is railed from Daltonganj. Altogether 73 miles of road have been made, of which 35 miles are practicable for cart traffic.

Protection. Fire protection has been in force since 1881-82, efforts being made to protect the whole area of the reserved forests; failures have averaged 16 square miles or 8½ per cent. of the total area per annum. Fires are chiefly caused by the practice of burning the undergrowth below *mahuā* trees and of burning wood for manuring fields outside the forests, and allowing such fires to spread. The *mahuā* burning clearance is perhaps the commonest cause of fires, as it is carried out in March or April, when the jungle is at its driest; when burning is carried out under the *dāhā* system of cultivation, in order to manure the land, thunderstorms usually occur and moisten the forests and undergrowth. There has been some incendiarism, but this has only affected small areas, and, on the whole, fire protection has been fairly successful. Such fires as have occurred in recent times do not appear to have done much harm, but a considerable part of the older stock seems to have been seriously damaged by fires which took place before reservation. Tapping of *sāl* trees for resin also appears to have been practised on a large scale formerly, and was probably the chief cause of the scarcity of trees over sapling size when reservation took place. The resin could be easily carried and easily sold, while timber had practically no value. The tapping is still done illicitly, but is now very rare. In the south of the district and in depressions frosts damage unprotected *sāl* seedlings and coppice shoots every year. Forest offences are few; the inhabitants of surrounding villages have, indeed, at present little inducement to steal produce, as they have access to relatively large areas of protected or private forests outside the reserves.

The chief exports are bamboos and grass, and to some extent *sāl* timber from the larger trees met with here and there; but the revenue is small, as prices are low. More produce might very well be exported, if there were a demand, but owing to the large wooded areas outside the Government forests, there is as yet little need for the people to fall back on the latter and thus create even a local demand. Besides *sāl*, which is generally found in the lowlands, forming a belt of pure forest at the foot of the hills, other valuable species, such as satin wood (Chloroxylon Swietenia),

ebony (Diospyros melanoxylon) and Bombay black wood (Dalbergia latifolia), all good woods for furniture, are found in the more hilly parts; but there are not sufficient trees of any size for a large and steady revenue. The other sources of revenue, such as lac, kino, cutch, *mahuā*, etc., bring in only a trifling revenue.

Minor produce. Bamboos are the most important of the forest products classed as minor produce. They are exported from Kechki, Betlā and Saidup, and there is a local demand for them from other forests, chiefly Kumāndih and Oreā, where the surrounding population is relatively dense and bamboos are becoming scarce outside the reserves. They are exported to other districts and also sold locally at Kechki and in Daltonganj by dealers. *Sabai* grass is found in the Saidup block on the hill sides near Harnāmānr, Chipādohar, Kerh and a few other places. Lac is cultivated to a small extent on the *palās* (Butea frondosa) and *kusum* (Schleichera trijuga), but the revenue from this source is not large, as it is cultivated by the people in almost every village. The manufacture of cutch (*kath*) from the *khair* tree, which is an important industry in this district, was carried on in the reserves up to 1900-01, but has since been stopped. For firewood there is only a limited demand, Kechki being the only block from which any is sold; a small amount is taken from it during the rains, when it can be transported by water to Daltonganj.

PROTECTED FORESTS. The protected forests cover an area of 71 square miles. The majority are situated in the Daltonganj, Gāru and Lātehār *tahsīls* and are more or less adjacent to the reserved forests. About 13 square miles are in Leslieganj, an area which comprises 10 small isolated blocks, ranging in size from less than one square mile to a little over 3 square miles. They are under the direct management of the Deputy Commissioner and are divided into 4 circles, each under a forester, with a subordinate staff of forest guards.

The history of these forests dates back to 1894 when Government issued a notification by which all waste lands that were the property of Government, with the exception of lands used by the villagers for cultivation or habitation, were declared protected forest. Subseqently in 1898 the protected forest was demarcated into blocks, after excluding in each village an extent of waste land not less than the cultivated area to allow for the extension of cultivation. Government approved the boundaries of the demarcated blocks subject to such occasional revision as time and experience might show to be required, and released the undemarcated area for the free use of the villagers, *i.e.*, for grazing,

reclamation of waste and the supply of jungle produce, without restriction. In 1902 the management of the forests was transferred from the Forest Department to the Deputy Commissioner, as the stringent rules in force and difficulties about grazing caused much discontent among the ryots. The boundaries of the blocks have been twice revised, in 1904 and 1905, the tenants being given lands suitable for cultivation in exchange for lands better adapted for tree growth.

Since the protected forests were first constituted, the object kept in view has been not to produce revenue but to conserve the forests so as to ensure a continuous supply of forest produce to the ryots of the Government estate. Some blocks are able to supply more timber, etc., than the ryots drawing on them need, and surplus produce is occasionally sold to outsiders at the same rates as are charged in the reserved forests; but other blocks are far less productive and are showing signs of deterioration. The growth is very much the same as in the reserved forests, but in some respects they have the advantage of the latter. The reserve forest boundaries, as a rule, go over ridges or skirt the face of a hill, just taking in perhaps a narrow fringe of *sāl* forest in the lowlands. The protected forests occupy more of the space at the foot of the hills, where the soil is far more suitable for the growth of *sāl*, which ceases altogether when the hills are reached, only a mixture of the less important species being found on the tops and sides of the hills, owing to the poorer soil met with there.

The protected forests consist of the surplus area left over in each Government village after allotting the tenants a sufficient quantity of waste-land in order to enable them to extend cultivation. The principle adopted was to allow for the latter purpose an area equal to that already under cultivation and to make the balance protected forest, if it exceeded half a square mile in area. This arrangement has led in some cases to unexpected results. Thus, in a village with an area of 3,000 acres, if 125 acres were cultivated, another 125 acres were allowed for the extension of cultivation, and the surplus area (2,750 acres) was constituted protected forest; but if 1,400 acres were under cultivation, there would be no protected forest, because after allowing the tenants another 1,400 acres, the surplus area would be 200 acres or less than half a square mile. In the first village, where the advance of the plough would *primâ facie* be most needed, it would be hindered by the large area given up to forest; in the latter village, where forest protection would presumably be required, it would be impossible. Endeavours have been made to start a system of coppices, in order to counteract such inequalities and also to

educate the tenants in a wise and prudent use of the timber at their disposal.

There are large private forests all over the district, but, as a rule, they are less valuable than either the reserved or protected forests, as the proprietors have only recently begun to preserve them. PRIVATE FORESTS.

In the southern part of the district, which contains the reserved forests, the population is at present so small that it is very difficult to imagine how the past population succeeded in destroying the forests to an extent which is unapproached in any other jungly district of Bengal. The reserves have been under protection 30 years, during which the Forest Department has spent on their preservation, and on such rough roads and buildings as have been constructed, Rs. 3,06,000 in excess of the revenue it has realized. This expenditure includes the cost of the protected forests up to 1902, when their management was transferred to the Civil Department. In consequence of their protection, the reserves now contain a promising young crop of *sāl*, the bulk of the trees being 1½ to 2½ feet in girth and some 40 years old. For the last two years their charge has been combined with that of the Hazāribāgh forests, which, under present conditions, give the Divisional Officer about twice as much work as the Palāmau reserves. After debiting two-thirds of the cost of management to the Hazāribāgh forests, the accounts of the Palāmau reserves for the two years ending on the 30th June 1906 have shewn a small profit totalling about Rs. 2,400 for the two years. It is hoped that, management being continued on present lines, the profit will gradually increase; but it will probably take about 30 years to work up to a substantial surplus, and it will not be possible to work the forests to the full before 50 or 60 years hence. PROSPECTS.

The protected forests in the neighbourhood of the reserves, in the southern part of the district, are in many respects similar to the latter. In most parts there has in recent years been little cutting of *sāl* or other reserved trees except *khair*, and the main difference between them and the reserves is that the soil has not improved and there is little or no tendency on the part of the numerous blanks and glades to fill up with tree growth. Grazing probably accounts for this difference, which is of great importance. So long as present conditions continue, and most of the ryots can obtain all or the bulk of their supplies of timber and firewood from Khās Mahāl lands, the preservation of these protected forests should not be difficult. But if the population increases largely, or the Khās Mahāl forests get worked out, their maintenance will, it is expected, become a matter of some difficulty.

CHAPTER VI.

AGRICULTURE.

GENERAL CONDITIONS. **Tracts of fertility.** FOR agricultural purposes the district may be regarded as consisting broadly of two interlacing zones. The first consists of the valleys of the Amānat, Koel and Son, and contains stretches of fertile alluvial soil covered with crops of rice and, to a less extent, of sugarcane, wheat, barley and gram. The second comprises the hilly tracts, where the land is generally composed of a thin, loose, gravelly soil. Most of the latter area is covered with jungle, and cultivation is mainly carried on in the valleys lying among the hills; even there it is very precarious owing to the irregularity of the rainfall. In this part of the district there is comparatively little rice cultivation; the *rabi* or winter crops are equally unimportant; and the population is mainly dependent for its sustenance on *bhadoi* crops, such as maize and *maruā* (Eleusine Coracana), which are raised during the rains.

Rainfall. The outturn of all the crops of the year depends on the distribution of the rainfall. For the *bhadoi* and late rice harvests the distribution most favourable to agriculture—the husbandman's ideal year—is when premonitory showers, falling in May or early in June, facilitate that spade husbandry which, to secure a really good crop, must precede ploughing operations. The rain in the end of June and in July should be heavy: then should come an interval of comparatively fair weather, in which weeding operations may be successfully prosecuted. The September rains must be heavy, shading off into fine weather with October showers. On the sufficiency of the September rains, more than of any other month, depends the character of the winter rice crop. Finally, periodic showers from December to February inclusive are essential to a good *rabi* harvest.*

IRRIGATION. Unfortunately, the rainfall is frequently either deficient or unfavourably distributed; and the result is that the agricultural prosperity of Palāmau is largely dependent on artificial means of irrigation. Both *rabi* and *bhadoi* crops, but more especially the former, are uncertain owing to the lightness and uncertainty of

* A. P. MacDonnell, *Food-grain supply of Bihār and Bengal*, Calcutta, 1876.

the rainfall and the rapidity with which all water runs off to the main streams. The outturn of the winter rice crop is equally precarious, unless means of storing up water to irrigate the fields are devised; for plentiful moisture is required in September and October to bring the rice plants to maturity, and it is at this period of the year that the monsoon is most apt to fail. Irrigation is thus just as necessary in the comparatively flat and wide-spreading plains of Japlā as it is in the south of the district, the difference being only one of degree. There are, it is true, a large number of rivers and streams, but with a few exceptions, they all rise in the district itself; and the supply in the larger streams diminishes rapidly, while that of the smaller streams fails altogether, soon after the cessation of the rains. To counteract such unfavourable conditions, the cultivators have recourse to numerous means of irrigation, such as reservoirs, water channels and wells. Much of the area under cultivation is very broken and undulating, and unsuitable to irrigation works, except on a small scale; but the ingenuity of the peasantry has done much to overcome these difficulties. Embankments are thrown across the natural slope of the country; small streams are dammed up and diverted to fill these rude reservoirs; and rice lands are laboriously constructed by terracing off the land in any suitable hollow, or the bed of a stream is banked up and made into one long narrow rice field.

The following is an account of the principal sources of irrigation.

The cultivation of rice is largely dependent on small *bāndhs* (also called *āhars* or *aharās*), of which an enormous number have been constructed all over the country in almost every depression of the ground. These *bāndhs*, which may be defined as reservoirs for the storage of water, vary in size from small tanks with banks a few feet high to large reservoirs with high strong banks, and are calculated to water from one or two acres up to 100 acres of land. They are made by throwing up embankments across drainage hollows or across the natural slope of the fields, so as to intercept and impound the surface drainage. These embankments, which are constructed of earth, usually are 8 to 10 feet in height, and have several outlets called *bhāos*, consisting of cylinders or tubes of baked earth stopped with plugs of mud and straw, which are taken out when it is necessary to drain off the water. As a rule, the outlets are kept closed during the rainy season, when there is no necessity for irrigation, and water accumulates in the bed of the *bāndh*. They are opened when water is required, *e.g.*, *Bāndhs.*

in the event of the rain holding off in August, when transplantation is in full swing, or at the close of the monsoon, when a supply of water is vitally necessary to bring the rice plants to maturity.

At the end of the rains, after the irrigation of the paddy is over, the water, if any, left in the *bāndh* is drained off, and the *dūb* or bed of the reservoir is cultivated with wheat, barley, and other cold weather crops. Otherwise, these crops receive little or no irrigation. Not only is it difficult to utilize the streams in their case, but the mere fact of bringing land within reach of stream water means that it is at once converted into rice land.

The landowners of all grades, as well as the cultivators, have for a long time past resorted to this as the only system of irrigation practicable under present conditions, viz., a system of small reservoirs, each serving a few acres in its immediate neighbourhood. There are also some important reservoirs formed by damming up nullahs and small streams, as well as a few instances of such small streams being weired across at suitable places, so as to divert the water by means of narrow water channels, called *paiṅs*, led off from their banks. The great majority, however, are formed so as to catch the surface drainage from the high land above them, and are of rude design and construction. They are not provided with escape weirs, and are therefore liable to be breached by heavy rain and made useless just at the time when they would be most useful for storing water. Those which form reservoirs large enough to be of material use in storing water, hold back the drainage of a considerable area; and escapes would consequently be expensive works, which the ordinary zamīndār has not sufficient engineering knowledge to provide, even if he is ready to face the cost. The duty of keeping them in proper order rests with the landlord, but any temporary breaches that may occur at the time of irrigation are repaired by the ryots themselves Unfortunately, many have silted up or have been rendered useless owing to the negligence of the landlords in keeping them in repair, in spite of the fact that such neglect results in a reduction of the rent roll In recent years, however, systematic measures have been undertaken in the Government estate to keep them in order, and this example has been followed by some of the leading zamīndārs.

Wells. Well water is used for the irrigation of vegetables, poppy and sugarcane. The former crops are grown in small plots of land adjoining the village homesteads, and are watered, as a rule, from permanent wells. For the cultivation of sugarcane, on the other

hand, *kachchā* wells, *i e.*, temporary wells unprotected by masonry, are generally used, as sugarcane is a crop which quickly exhausts the land and requires an annual change of soil; consequently, the cultivators sink temporary wells in the land planted with sugarcane from year to year, and these serve their purpose till the cane is cut. Irrigation from wells is most common in the north and centre of the district, and is rarely resorted to in the south.

The most usual contrivance for raising the water consists of the *lāthā* or lever. This is a long beam working on an upright forked post, or two posts placed a short distance apart, which serves as a fulcrum; at one end, the beam is weighted with a log, stone or mass of dried mud, and at the other is a rope with an iron cone-shaped bucket (*kunri*) attached. When not in use, the bucket rests above the well, and when water is required, the cultivator pulls down the rope till it is immersed. The weight attached to the lever then raises the bucket of itself; and the water is emptied and led by narrow channels into the fields.

Wells are not practicable in most parts of the district, as their excavation would involve an amount of rock cutting beyond the means of the cultivators. In any case, they serve a small area, and artificial irrigation is, consequently, almost entirely confined to the construction of reservoirs or *bāndhs*, the more useful and valuable of which are kept filled by the waters of streams diverted from their course; it is estimated that half the area under rice is irrigated in this manner. Great skill is often shewn in planning and carrying out these schemes, so that water shall be utilized to the fullest possible extent; and water is often carried by means of rude channels and raised embankments for a distance of 6 or 7 miles. These works are extraordinarily remunerative, and seldom yield, in the increased outturn of the crops, a profit of less than 20 to 25 per cent. Capital and energy are the only two things wanting to ensure the extension of such works all over the district. The progress made of late years has been very promising, and the number of reservoirs found during the last settlement of the Palāmau Government Estate was 1,095 against 148 enumerated 15 years previously. Extension of irrigation.

As regards large schemes of irrigation, extensive canals seem to be impracticable, for the main streams are well below the level of the country it is desired to irrigate; and the only remunerative method of irrigation is to tap each tributary near its source and make it serve the country below; occasionally, near the confluence of the main tributaries with the Son or Koel, it is possible to tap

a stream with a drainage area of some magnitude. It is in the energy and skill with which works on these lines are carried out that the future agricultural prosperity of Palāmau must depend; and a few such works, as mentioned at the close of Chapter VII, have already been undertaken. At present, the district depends almost entirely on *bāndhs* or reservoirs for the success or failure of the winter rice crop, but in most cases their catchment area is so small that the protection afforded can only affect a limited area and extend over a short period; for the supply of water, being purely local, is apt to fail soon after the end of the monsoon. Many are not really storage reservoirs at all, but act practically as high weirs, enabling high land to be commanded and brought under cultivation, and *rabi* crops to be grown; they are merely intended to hold up the water, which then percolates into the lower land, and keeps it moist, while the reservoir itself is sown with crops as soon as it becomes sufficiently dry.

Still, these reservoirs constitute practically the only famine protective works in the district with the exception of the larger schemes above mentioned, and they are incalculably useful in a year of deficient or unequally distributed rainfall. "It is impossible," says Mr. Sunder in the Settlement Report "to say too much of the utility of *āhars* or of the urgent necessity for making them wherever possible, and also of the importance of repairing them wherever they may be broken either from the thoughtlessness of tenants, in making cuttings in the embankment for the purpose of obtaining more water than passes out of the *bhāo*, or from long neglect. Villages where *āhars* are in order never fail to give the agriculturist a good harvest of paddy whether rainfall be sufficient or not, while villages where *āhars* are in disrepair or where there are no *āhars* yield little or no paddy. Unlike other districts, Palāmau depends on reservoirs alone for the success or failure of the winter rice crop. If these be full of water, there is generally nothing to fear. If they be empty, paddy fails, and wheat and barley also yield a small outturn."

SOILS. The soils of the district are known by various names according to their situation, quality and composition. They may, however, be primarily divided into the low lands suitable for rice cultivation and the village uplands. The low lands are known as *dohar* or *dhankhet*, and are situated either in river valleys or in the shallow drainage hollows that intersect the country and slope down to the various streams. Along the latter are constructed sloping terraces of paddy land, at the head of which is placed the *bāndh* or embankment which serves to irrigate the lands below and also to stop the destructive rush of water which would wash the terraces away.

Rice land is also called *soti* (from *sot*, a current), when it consists of a narrow strip between two upland ridges; while high-lying terraces which cannot be irrigated from a *bāndh* are called *chātar* land. The uplands, which grow various cereals, pulses, etc., are known collectively as *bhīta* and are divided into 3 main classes, *bārī*, *dihkam* and *baharsi*. *Bāri* lands are the plots immediately surrounding the homestead, which usually contain the most fertile soil in the village, as they get all the manurial refuse of the houses, and are therefore used for growing vegetables and other garden produce. *Dihkam* land is the land immediately surrounding the village, which grows wheat, *maruā*, mustard, sugarcane, and other valuable crops. *Baharsi* land is the land forming the outer ring of uplands round the village, which are cultivated for the most part with *rabi* or cold-weather crops. *Tānr* is outlying upland reclaimed from the jungle, which is cropped with inferior kinds of millets and *til* or gingelly. These uplands are sometimes allowed to relapse into jungle and then again cleared, the growth which springs up in the meantime being burnt to serve as a manure. In *pargana* Torī and the *tappās* adjoining Rānchī the terms current in that district are employed, *e.g.*, *korkar* for newly prepared land.

Rice lands (*dhankhet*) are again subdivided, according to quality, into first, second, third or fourth class lands, which are called, after the Persian numerals, *āwal*, *doem*, *seum*, and *chahārum* respectively. Generally, however, the cultivators call their inferior rice lands *unchchat*, *upwarwār* and *chaur*, while *aj*, *jāh* and *gahirā* are expressions used for the best low lands in which winter rice is grown; embanked lands are called *ariawat*. Turning to the classification by composition, the most fertile soil is *kewāl*, a species of hard stiff clay, extremely retentive of moisture, which is principally devoted to the cultivation of rice, wheat and barley. *Garia kewāl* is a whitish soil containing a large proportion of nodular lime (*kankar*), and *domā kewāl* is a hard black clay, which, like *garia*, is a good rice-producing soil when irrigated, but does not grow such good *rabi* crops. *Balsundar* is a soil with a considerable admixture of sand, which yields good crops of rice when irrigated, and *dorasa* is a loamy soil also suitable for rice cultivation but inferior to *kewāl*. *Pāwar* is a sandy friable soil, which is regarded as a poor rice land, but grows gram, *maruā* and barley. Other names for inferior soils are *akraut*, a sandy, gravelly soil mixed with clay; *gangti*, a calcareous soil containing *kankar*; *pathli* or *ankri*, a reddish soil full of gravel and pebbles, found on the slopes and at the bottom of ravines; and *lālmati*, the red ferruginous soil found

in the south of the district near the Chotā Nāgpur plateau and in gneissic hillocks and ridges in the north-west.

PRINCIPAL CROPS.

The crops grown in Palāmau are divided into three great divisions, the *aghani*, *bhadoi* and *rabi* crops. The *aghani* is the winter crop consisting of sugarcane and of winter rice, which is cut in the month of Aghan (November-December); the *bhadoi* is the early or autumn crop, reaped in the month of Bhādo (August-September), consisting of 60 days' rice, *maruā*, *kodo*, maize, millets and less important grains; while the *rabi* crop, which is so called because it is harvested in the spring (*rabi*), includes such cold-weather crops as gram, wheat, barley, oats, and pulses. The normal acreage of the *aghani* crops is 324,600 acres or 57 per cent. of the normal net cropped area, of the *bhadoi* crops 182,000 acres (32 per cent.) and of the *rabi* crops 270,300 acres (47 per cent.). The *bhadoi* crops are the staple crops in the more hilly tracts, where they form the main source of the food supply of the people. The *aghani* and *rabi* crops, on the other hand, are cultivated extensively in the alluvial plains formed by the Son, Koel and Amānat, and here the area given up to *bhadoi* crops is comparatively small.

Rice.

Rice, which is grown on a normal area of 353,200 acres, is the most important crop of the district. *Aghani* or winter rice forms the greater part of this crop, being raised on a normal area of 319,600 acres or 56 per cent. of the normal net cropped area. The area under this crop is extending rapidly as new reservoirs bring more land under irrigation. It is for the most part transplanted (*ropā dhān*), and is first sown after the commencement of the rains in June or July on lands selected for seed nurseries, which have previously been ploughed three or four times. After four or six weeks, when the young plants are about a foot high, they are generally transplanted; each plant being pulled out from the land, which is soft with standing water, and planted again in rows in flooded fields in which the soil has been puddled. The rice is then left to mature, with the aid of water, till towards the end of September. The water is next drained off and the fields are allowed to dry for 15 days, and at the end of that time they are again flooded. It is this practice, which makes the rainfall, or failing that, irrigation, essential to a successful harvest. These late rains (the *Hathiyā*) are the most important in the year, as not only are they required to bring the winter crops to maturity but also to provide moisture for the sowing of the *rabi* crops. Should no rain fall at this period, or if water cannot be procured from artificial sources, the plants will wither and become only fit for fodder; but if seasonable showers fall or the crops

obtain a sufficient supply from *āhars* the rice comes to maturity in November or December and is then reaped.

A certain proportion of the rice is sown broadcast in May or June in low-lying lands and is not transplanted; this system of cultivation is known as *rasbunā* or *dhuriā bāwag*.

Bhadoi rice, which is grown on a normal area of 33,000 acres or 6 per cent. of the normal net cropped area is also sown broadcast in June or July and is not transplanted; it is regarded as a 60-days' crop and is generally harvested in September and October. One variety known as *tema* is sown broadcast in February and March and reaped in May and June; it is grown to a small extent in the beds of streams to the south. Other varieties are known as *karhar*. and *gorā dhān*, the latter of which is grown by the cultivators in the south on upland fields not surrounded by the small ridges (called *āls*) which are used in low-lying land to retain water. *Bhadoi rice.*

Gram or *būnt* (Cicer arietinum) is the most important of the *rabi* crops, being grown on a normal area of 71,500 acres or 13 per cent. of the normal net cropped area. It is, as a rule, grown by itself, but occasionally it forms part of a mixed crop with wheat. It is sown in October and November and harvested at the end of the cold weather in March or April.* Gram.

After gram, the largest area is occupied by maize or Indian corn, which is grown on a normal area of 55,000 acres or 10 per cent. of the normal net cropped area. It is by far the most important of the *bhadoi* crops, being grown by almost every ryot; and it forms the chief crop in the hilly parts, where the cultivation of winter rice and *rabi* crops cannot be profitably carried on. It furnishes, in fact, one of the staple foods of the district. It is sown in June and July and harvested in September and October. The cobs begin to appear within a month after sowing, and thenceforward the fields have to be carefully watched to prevent injury by birds and beasts, as well as loss by theft. Maize.

Barley, with a normal area of 30,800 acres, ranks next to gram among the *rabi* crops. It is grown in all parts of Palāmau, except in the hilly tracts inhabited by tribes of aboriginal descent, who show little aptitude for the cultivation of food-crops other than their favourite millets. It is essentially the food of the poorer classes, who eat the grain boiled or fried, make it into bread, or consume it in the form of *sattu*. The last preparation is the one most appreciated, the grain being first parched and then ground into a coarse flour; and it usually forms the midday meal of the labouring classes, seasoned with chillies and a little salt. Barley is, as a rule, grown on *bhita* land and occasionally Barley.

on *chātar*, *i.e.*, the higher rice terraces, after some earlier varieties of rice have been cropped.

Wheat. Wheat, which occupies a normal area of 16,200 acres, is grown more or less in all parts of Palāmau, except in the hilly tracts where the soil is too loose and gravelly to admit of its cultivation; it is grown most extensively in the valleys of the Koel and Amānat and in the narrow strip of flat country fringing the district on the north. It thrives in *kewāl* or strong clayey soils and also does well in loamy soils and alluvial deposits, but the best outturn is obtained when it is grown on the beds of *āhars*.

Maruā. *Maruā* (Eleusine coracana), with a normal area of 21,700 acres, ranks next in importance to maize among the *bhadoi* crops. It is grown in all parts of the district and is one of the main food crops in the hilly tracts. It is nearly always transplanted, and being an exhausting crop is not grown on the same land for two successive years; it is also a late crop, not being ready for the sickle till November.

Other cereals and pulses. *Bājra* or spiked millet (Pennisetum typhoideum) is grown on 2,500 acres, and *jowār* (Sorghum vulgare) on 700 acres. Other cereals and pulses account for no less than 148,500 acres (49,500 acres *bhadoi* and 99,000 acres *rabi*) and include many different varieties. Among the cereals *sāwān* (Panicum frumentaceum), *kodo* (Paspalum scrobiculatum), *menjhri* (Panicum psilopodium) and *gondli* (Panicum miliare) are inferior millets grown over large areas by the poorer ryots, especially by those of aboriginal descent in the hilly tracts, where there is a good deal of fallow *tānr* land available. *Chīna* (Panicum miliaceum) is a fine kind of millet, of which one variety is grown on irrigated lands along the banks of the Amānat and another by aboriginal tribes in the villages to the south.

Among the pulses are *urid* (Phaseolus Roxburghii), *barai* (Phaseolus mungo), both grown in the rains, and *kurthī* (Dolichus biflorus), a winter crop. *Rahar* (Cajanus indicus) is cultivated both in the plains and in the hills, the aboriginal cultivators of the latter exchanging the produce for rice and salt. The species raised by them is much larger than in the plains and is grown under what is called the *beorā* system, the land being cleared by burning the jungle and the seeds planted in holes drilled about a cubic apart. *Khesāri* (Lathyrus sativus), a species of vetch, is sown immediately after the rains among the standing paddy and yields a coarse cheap pulse, which is eaten in the form of *sattu* or boiled and eaten as *dāl*; and *masuri* (Ervum lens) is a lentil, eaten in the same way.

The most important oil-seeds are rape and mustard, which occupy 17,600 acres, linseed, which is cultivated on an equal area, *til* or gingelly (Sesamum indicum), grown on 8,900 acres, and the castor-oil plant.

Sugarcane (5,000 acres) is grown in the valleys in the north and centre of Palāmau, and is most common in the country round Hariharganj in the north-east corner of the district; it is not cultivated in the south. The juice of the canes is extracted by means of the iron roller mills manufactured at Bihiā in the Shāhābād district and hence known as Bihiā mills. Sugar-cane.

Cotton is a favourite crop with the semi-aboriginal tribes, and the principal centres of cultivation are the hilly jungly tracts in which such tribes live. There are two methods of raising cotton (*kapās*) called respectively *kachhwā* and *dāhā*. The first system hardly needs description. The land selected is ploughed three or four times, and is then left till the next shower falls, when the seed is sown broadcast. This method is generally unpopular owing to the amount of weeding required; the cultivator either cannot afford hired labour or is too indolent to do it himself; and cotton sown in this way is generally choked by weeds. The second method, called *dāhā*, is by far the most common. In this case the land selected is generally forest land, which is cleared by cutting down the trees, the stumps alone being left standing. The whole field is then covered with a thick layer of brush-wood, which is set on fire during the hot weather. This firing has a two-fold object; it burns up the roots of all grass and weeds lying near the surface, thus effecting a certain saving in weeding; and secondly, the alkali contained in the ashes is an excellent manure. It is not often, however, that this latter advantage is secured, for unless a shower happens to fall immediately after the land has been fired, the strong west winds carry away the ashes. As soon as the first showers have fallen, the cultivator ploughs up the land and sows the seed broadcast; when this has been done he proceeds to fence the field round to keep off deer, which are very fond of the crop; and this is the only expense he incurs till the time comes to gather the crop. Cotton.

The *dāhā* system being the one most commonly practised, it is not surprising that the growth of cotton has decreased rapidly with the extension of settled cultivation, as the jungle is gradually burnt down or gives place to the plough, and also owing to the constitution of reserved and protected forests, where such a system is strictly prohibited. In 1872 the area under cotton was 9,600 acres; in the 5 years ending in 1905-06 it averaged only 4,320 acres; and in 1906-07 it had fallen to 1,500 acres.

Poppy. Poppy is grown only in the north of the district in the alluvial tract stretching from east to west between Hariharganj and Belaunjā, where it is raised on 1,200 acres. It is cultivated mostly by those born market-gardeners, the Koiris, and the land devoted to it is generally homestead land, which is highly manured and easily irrigated. The poppy cultivated is exclusively the white variety (Papaver somniferum), from which opium is manufactured. The production of opium is a Government monopoly, and no person is allowed to grow poppy except on account of Government. Annual engagements are entered into by the cultivators, who, in consideration of the payment of advances, agree to cultivate a certain quantity of land with poppy, and to deliver the whole of the opium produced to the Government at a rate fixed according to its consistence, but subject to deductions for inferiority of quality. Advances are made from the Opium Department office at Muhammadganj, and the opium produced is examined and weighed there.

AGRICULTURAL STATISTICS. According to the official returns for 1905-06, out of a total area of 4,914 square miles, no less than 2,413 square miles, or nearly half the whole district, are not available for cultivation, while 260 square miles are under Government forest. Current fallows accounted for 479 square miles, while 1,074 square miles were classed as culturable waste other than fallows; and the net area cropped during the year was 688 square miles, 17½ square miles being cropped more than once. Of the total cultivated area, 637 square miles were under cereals and pulses and 50 square miles under oil-seeds.

EXTENSION OF CULTIVATION. The area under cultivation in the Government estate alone increased from 68 square miles to 88 square miles between 1870 and 1896, *i.e.*, by 29·6 per cent. This increase has been accompanied by a large extension of the area under rice, and at the last settlement it was found that there were 13,889 acres classified as *dhankhet* or rice land as compared with 10,459 acres at the settlement of 1869-70, representing an increase of over 30 per cent.

As regards the extension of cultivation in more recent years it is reported that it tends to increase yearly, but increase or decrease is entirely dependent on the policy pursued by the landlord. If he adopts a wise and enlightened attitude to his ryots and repairs the irrigation *bāndhs*, he will have a yearly increasing rent-roll and a prosperous tenantry. But unless he is prepared to spend money, his villages will fall into disrepair (an exact translation of the term employed), and cultivation will decrease. There has been a very marked increase of cultivation since the road cess revaluation in 1892-93, when the annual value of all lands was

raised from Rs. 6,34,633 to Rs. 10,81,516, and the Government estate showed an increase in cultivation of 11 per cent. between 1896 and 1903. The revaluation completed in 1907 shews that this movement has continued steadily, the value of lands being raised to over 16 lakhs, including approximately one lakh for *pargana* Torī and 10 lakhs for the Government estate; but it is reported that in the private estates a considerable amount of upland is, owing to a boom in lac, being allowed to go out of cultivation and devoted to the growth of *palās* trees.

IMPROVED METHODS OF CULTIVATION.

In the hilly tracts, agriculture may be said to be in its infancy. Here the aboriginal tribes practise the primitive methods of cultivation handed down to them from time immemorial; roaming from spur to spur, clearing small patches of ground, and cultivating a few hardy crops. They use neither plough nor hoe, and are content to plant their seeds in small holes drilled with a pointed bamboo. This system, which is known as *beorā*, is now confined to a narrow area, the denuding of jungle in this manner having been stopped in the large Government estate. The more civilized and semi-Hinduized tribes are also incapable of continued exertions, and possess neither the patience nor the skill necessary to raise the more valuable crops which require frequent irrigation, hoeing and weeding. They live in the midst of jungle, and grow chiefly crops that require little manual labour, such as maize, cotton and various millets.

In the north of the district the methods of cultivation differ in no material respects from those followed in South Bihār, and here are found a large number of those adroit and patient cultivators, the Koiris, who produce crops, such as poppy, sugarcane and vegetables, requiring unremitting attention and a large expenditure of time, money and labour. Owing to the presence of these and other born cultivators, the Bihiā sugar mill has come into favour, and has entirely supplanted the old-fashioned wooden mill. Efforts have also been made in a somewhat spasmodic manner to improve the quality of crops by selection of seed, but much greater success has attended the introduction of new varieties, and sugarcane, chillies, linseed, potatoes and gram have been cultivated in a continually increasing degree of late years.

Working of Loans Acts.

The provisions of the Land Improvement and Agriculturists' Loans Acts have been utilized to an extent surpassed in few districts in Bengal. The former Act, which provides for advances being given by Government to any person legally entitled to make improvements, or to any other person with his consent, is intended to provide chiefly for the excavation of tanks, reclamation of land, and construction of embankments for

purposes of irrigation; the latter Act is chiefly directed to supplying the wants of ryots in the matter of seed and cattle. Operations under these Acts are of comparatively recent origin, the first loans being granted during the famine of 1897, when Rs. 66,000 were advanced. Further grants amounting to Rs. 74,000 were made up to 1901-02, with the object of tiding over distress; but since then operations have been extended widely, the landlords being induced to take Government loans on liberal terms and repair the irrigation works on their estates, while large sums have been granted to the Government tenants at an easy rate of interest to enable them to buy bullocks and seed without getting into the clutches of the *mahājans.* It is reported that in that year it was realized that, if Government, which is the proprietor of one-tenth of the district, was to have a prosperous tenantry and prevent the shrewd up-country money-lenders from ousting the aboriginal tenants from their holdings, it must itself take up the responsibility of lending money at a reasonable rate of interest. At the same time, it was felt that the zamīndārs, most of whom were greatly impoverished, were in as great a need of help as the tenants. The necessity of repairing their irrigation works was impressed upon them, loans at an easy rate of interest, with a liberal provision for repayment by instalments, were offered them, and Government set them the example of repairing the works on its own estate on a thorough scale. The nomadic tenantry were not slow to see where their profit lay, and an exodus from *jāgīrdāri* to Government villages set in. The landlords, seeing this, accepted the proffered aid of Government and began to put their own properties in order; and the result was a remarkable wave of prosperity.

GE-BLES D UITS.

The vegetables of Palāmau include potatoes, tomatoes, radishes, sweet potatoes, beans, mushrooms, cucumber, the *baigun* or brinjal (Solanum melongena), various gourds, and the vegetable known as ladies' finger or *rāmtarai.* Among cultivated fruits mangoes take a prominent place; they are grown all over the district and numerous large groves are found towards the north. Melons are cultivated extensively along the banks of streams; and other fruits are the plantain, orange, custard apple, mulberry, guava, pomegranate and pomelo or shaddock. The fruits of the jack and *bel* trees are used for food, but of all the fruit-bearing trees the *mahuā* (Bassia latifolia) is of the greatest economic importance.

The *mahuā* is found in great abundance all over the district, and though it is only a supplementary article of food when cereals are cheap, it is the main resource of the aboriginal tribes in times of scarcity. The part of the *mahuā* which is eaten is the corolla

of the flowers, a fleshy blossom of a pale yellow colour; when fresh it has a disagreeable smell but a peculiarly luscious taste, and is excellent for quenching thirst; when dried, it is very like a raisin. The blossoms spring from the ends of the smaller branches of the tree, in bunches of from twenty to thirty, and, as they approach ripeness, swell with juice and fall to the ground. Much depends on the weather while the flowers are developing; the crop requires sun, and cloudy weather and thunderstorms are most destructive.

As soon as the buds appear, the ground is carefully cleared, all grass and weeds growing beneath the trees being removed, usually by burning. The first fall of the blossoms is the signal for the women and children to commence work. Those whose homes are near their trees go out to work at dawn, returning two or three times during the day with what they have gathered; but where the trees are at a distance, the whole family encamps close by and remains there till the entire crop has been gathered. After being gathered, it is spread out to dry upon the ground, which has previously been smeared with a coating of cow-dung and mud.

The blossoms are rarely eaten while fresh, being considered unwholesome, but are kept in the sun till they are dried, when they turn a light brown and resemble raisins. There are several methods of preparing the blossom for food, the most common being to boil it; but as this seems to take all flavour out of it, the seeds of the *sāl*, or some acid leaves or herbs, are cooked with it, in order to render it palatable. Another plan is to fry it in *ghī* or butter, but this is too expensive a luxury to be indulged in by most people. Another important use to which the *mahuā* blossoms are applied is in the distillation of spirit.

The fruit of the *mahuā* commences to form immediately after the fall of the blossoms, and ripens in June. The fruit is never broken from the tree, nor is the tree shaken to induce it to fall; should this be done, the tree, it is said, will not bear any fruit the following year: consequently, it is allowed to drop of itself. The fruit, when ripe, is about the size of a peach, and has three separate skins, with a white nut or kernel inside. The whole of the fruit is utilized in the following ways. The two outer skins are either eaten raw or cooked as a vegetable; the inner skin is dried and ground up into flour (*sattu*). Of the kernel an oil is made, which is largely used for cooking purposes and for adulterating *ghī*.

Next in importance as an article of food is the *bair* or wild plum (Zizyphus jujuba); it grows upon a small thorny thicket or

bush, and is found all over the district. When half ripe, it has the pleasant acidity of an apple, and is eaten in large quantities; when fully ripe, it is gathered, dried and stored, and is eaten either boiled or in an uncooked state The thorny branches furnish material for a cheap and impervious hedge The *piār* is the small black fruit of the tree of that name, and resembles a sloe in appearance. It grows plentifully in the more jungly parts, and is gathered and dried in the same way as the *bair*. The two small stones inside the fruit, which are known as *chiraunji*, are made into a delicate sweetmeat.

The forests contain numerous other edible fruits and roots, and for at least eight months in the year furnish the people of the jungly villages with a supply of food, which, though perhaps not very substantial, is still sufficiently nutritious to prevent starvation; and in this respect they are better off in times of distress caused by a failure of the crops than the inhabitants of the more highly cultivated parts. Some of the roots are highly nutritious and form a favourite article of food with the wilder tribes. The latter, indeed, are the only people who know where to find them, as they lie at a depth of several feet below the surface, with nothing above ground—to an ordinary observer at least - to indicate their presence, so that one might almost imagine that instinct alone enables these hill men to tell where the root is lying.

CATTLE.

Palāmau is well stocked with cattle, but the local breed is, on the whole, of poor quality. There is, in fact, a supreme indifference to the welfare of cattle, which are rarely housed and die of cold and disease as they stand tethered to some tree during the rains. Some improvement has been effected by crossing with half-bred bulls from Bihār, but otherwise little or no attempt has been made to improve the breed. In the south and south-west the forests form a vast grazing ground, and the remainder of the district, with the exception of the well cultivated valleys, is coated with a thin covering of jungle in which the village herds are pastured. In the rains the jungles contain an abundance of grass, but in the hot weather grass is scanty, and as the streams and pools dry up, there is great scarcity of water. During this period of the year, therefore, the owners of cattle feed them on such straw and husks as they have managed to save during the winter months, or, which is far more common, send the herds to the uplands of Sirguja, where water and pasturage are found in abundance. At the close of the rains they are brought back and grazed in the jungles adjoining the villages until the approach of the hot weather.

Large herds of buffaloes are found in nearly every part of the district, especially in the south and west. They are rarely used for the plough, except by Orāons, and are chiefly valued for the milk which they yield in large quantities. This is made up into *ghī*, which is one of the chief articles of export. The local breed of sheep is generally black in colour, occasionally of a mixed black and white, and very rarely pure white. They are somewhat smaller than the sheep of Bihār, and their wool is shorter and inferior in quality. Pigs and goats are numerous, the latter being bought up by butchers from Bihār. Ponies are used both for riding and, less commonly, as pack ponies; they are generally small in size and of a stunted weedy breed.

Veterinary relief.

The most prevalent diseases among cattle are rinderpest and foot-and-mouth disease; in the year 1903-04 no less than 4,578 cases of the former and 9,056 cases of the latter disease were reported, and in subsequent years there have been similar outbreaks, though less severe and widespread. There is a Veterinary Dispensary at Daltonganj, established a few years ago, which is steadily gaining popularity, the figures of attendance rising year by year; in 1905-06 altogether 589 horses and 835 cattle were treated. Animals in the interior are also treated by the Veterinary Assistant on tour, and in the same year over 1,700 horses and cattle were treated in 190 outlying villages. In 1907 another Veterinary Assistant was appointed to attend to cattle in the estates managed under the Encumbered Estates Act.

CHAPTER VII.

NATURAL CALAMITIES.

LIABILITY TO FAMINE. PALAMAU has been characterized by the Indian Irrigation Commission as "the driest and probably the poorest district of the Province." Within the last 40 years it has suffered from no less than 4 famines, in 1869, in 1874, in 1897 and in 1900, all the direct outcome of drought. The severity of these famines varied considerably in different parts of the district, according to the extent to which the food-supply of the people is derived from the *aghani*, *bhadoi* and *rabi* crops. The north and centre of the district are chiefly under rice and *rabi* crops, such as wheat, barley and gram, while *bhadoi* crops are grown only to a small extent. In the hilly tracts, there is comparatively little rice cultivation, and much less of *rabi;* while *bhadoi* crops, such as maize, *maruā*, *sāwān* and *kodo*, are extensively cultivated. Generally speaking, the loss of the rice harvest tells severely on the population inhabiting the valleys, while the aboriginal inhabitants of the hills are not affected by its failure, provided that there is a bumper *bhadoi* harvest; on the other hand, they obtain little relief from a plentiful harvest of rice and *rabi*, if it is preceded by the loss of the *bhadoi* crops.

These aborigines, however, have a resource, unknown to cultivators in other districts, in the edible jungle products which enable them to eke out their existence under conditions which would result in starvation elsewhere. They are consequently safeguarded from very severe famine; but these scanty meals of forest produce, when continuously taken without the usual accompaniment of rice or other digestible food, produce effects very injurious to general health. They sustain life, it is true, but the unwholesomeness of the diet, taken by itself, is apparent from the blotches and sores caused by the excessive use of the *bhelwā* and other fruits, and in the end results in such a reduction of the system as to render the people an easy prey to any prevailing sickness. This was very clearly demonstrated in the famine of 1897, when it was found that poorer classes inhabiting those parts of the district which produce most of the edible jungle products,

became, in the long run, more emaciated and debilitated than in other parts of the district.

Of late years famine or scarcity has been worst in the Mahuādānr, Lātehār and Bālumāth thānas. Mahuādānr is a very hilly and sparsely populated area in the south, with only 54 persons per square mile, where extensive cultivation is practically impossible. Lātehār, about 40 miles south-east of Daltonganj, comprises an undulating country, in which cultivation is carried on, here and there, with difficulty; while Bālumāth in the extreme east of the district suffered very severely in 1900, though there was no excessive scarcity in 1897.

The following is an account of the famines which have visited Palāmau during the last 40 years.

FAMINE OF 1869.

The famine of 1869 was due to the failure both of the *bhadoi* and winter rice crops. The *bhadoi* crops of 1868 failed almost entirely in the north-east and north-west, and nearly half was lost in the centre of the district. The winter rice fared even worse, owing to the absence of rainfall from September onwards, and was a total failure in most parts. This was followed by a partial failure of the *rabi* crops, many of which could not be sown owing to the dryness of the soil. The parts most affected were the north-east and north-west, and, to a smaller extent, the centre of the district; in the south and south-east the outturn of the crops was much better, while an abundant harvest was reaped in the Chhechhāri valley. Relief works were started in October 1868, and the number of persons employed rose to 6,357 at the end of June, after which it gradually dwindled till the 15th October 1869, when the works were finally closed.

FAMINE OF 1874.

The year 1873-74 opened with a comparatively short food-supply owing to deficient harvests in the preceding year, and a very poor *mahuā* crop in the spring of 1873. The *bhadoi* crops of maize and *maruā* also failed almost completely in 1873, and the *aghani* paddy was equally a failure. The outturn of the latter was estimated at 2 to 4 annas in *parganas* Japlā, Deogan and Belaunjā in the north and in Untāri in the extreme north-west, while it was 5 to 7 annas in the central, southern and south-western tracts. The pressure of the famine was most severely felt in the *parganas* mentioned and in Pundāg to the east, and here distress lasted from January to June 1874. The distribution of charitable relief was commenced in the latter half of March and was continued till the 8th August following; during this period 375 persons, on the average, daily received relief in their own homes, generally in the shape of grain. Relief works were opened in February, and at the

end of that month 5,377 labourers were employed. In the first week of March there was a sudden rise to 12,025, but a fortnight afterwards the number fell to 7,936, owing to the incoming of the *rabi* and *mahuā* harvest. After this, it gradually rose till it reached the maximum of 25,040 at the end of May. It was then discovered that the prescribed rates of wages was too high, that the manner of enforcing works was too lenient, and that many of the labourers were putting by savings out of their daily wages. On this discovery being made, orders were given for the enforcement of task-work and for payment of wages in grain, with the result that the number of labourers fell at once from 25,040 to 1,493 in the beginning of June; and even of this small number 822 were professional Nuniyās employed on special work. The works were finally closed in July.

At no time during the distress was any actual scarcity of food felt in the district, then a subdivision of Lohārdagā. When the authorities saw that a famine was imminent, they invited the assistance of the zamīndārs and encouraged grain-dealers to import food-grains; and even the ordinary cultivators were moved to utilize their plough cattle for importing grain on their own account. Large quantities of grain were thus kept continually pouring in from Lohārdagā, and the Tributary States of Sirguja, Gāngpur and Jashpur. The country was, in fact, soon overstocked with food. Over and above this, *mahuā* became so abundant that in August it was reported to be selling at 5 maunds for the rupee and to be unsaleable in many places. The total expenditure in this famine was 2 lakhs, of which 1½ lakhs were spent on the wages of labourers, and half a lakh was advanced in the form of loans.

FAMINE OF 1897. The famine of 1896-97 was the severest through which the district has yet passed. In this famine the most distressed area covered about 2,563 square miles, with a population of 383,400 souls, and was comprised in a broad tract running from east to west through the centre of the district. The worst tracts lay in the jurisdiction of thānas Garhwā, Daltonganj, Bālumāth, Lātehār and Pātan, including the outposts of Untāri, Leslieganj, Pānki, Chandwā, Kerh and Manātu. In the north the distress was less acute, and the state of things gradually improved until the Gayā border was reached; the corresponding block to the south, which borders on the Sirguja State and the Rānchī district, and which abounds in forest products, was also less seriously affected.

In 1895 there was very little rain in May, heavy rain in June, July and August, moderate rain in September, slight

rain in October, and none in the remaining months of the year. The result of this unfavourable distribution was that the *bhadoi* crop was only an 11-anna one, the winter rice crop a 10-anna one, and the *rabi* crop an 8-anna one. In 1896 the distribution of the rain was very similar, for there was no rain in May, very heavy rain in June, July and August, moderate rain in September and no rain in October. The result was that the outturn of *bhadoi* was only 9½ annas, and that of winter rice 5 annas only. Again, owing to there being no rain in October, and none until the last week in November, very little *rabi* was sown, and a fair yield was obtained only from crops sown in beds of reservoirs. After the rain in the end of November large areas were sown with wheat, barley and gram, but these crops, as well as those sown on high lands in October, were attacked, some by rust, and others by crickets and other insects. The result was that the outturn of *rabi* did not exceed 6¾ annas. The *mahuā* crop, which promised at one time to be a bumper one, was also so seriously damaged by storms of wind and rain, accompanied by thunder and lightning, in February and March, that only a 6-anna crop was eventually gathered The mango crop again was an absolute failure, the blossoms having been entirely destroyed by the inclement weather in March.

With bad crops in 1895-96, and worse ones in 1896-97, the district was soon reduced to a state of famine; and what aggravated matters was that surrounding districts were reduced to the same plight. In October 1896 prices began to rise and soon went up to famine rates; and in the beginning of December it was estimated that the stock of food remaining in the district was only sufficient to meet the requirements of the people for about a month. In the middle of January exports from the Rānchī plateau suddenly ceased almost entirely, while all exports from the Native States were stopped by the orders of the different chiefs. The average price of rice rose to 8 seers 11 chittacks, and at the end of the month works were started. These were converted into relief works in the ensuing month, the distribution of charitable relief was commenced, and in view of the dangerously depleted stocks, Government sanctioned a bounty on importation. By the end of April the average price of rice had risen to 6 seers 13 chittacks per rupee, but, in spite of this, the number on relief works was surprisingly small owing to the advent of the *mahuā* season and to the consumption of jungle products. Prices continued to rise steadily, and by the end of June the average price of rice had gone up to 6½ seers and of Indian corn to about 8 seers, while *mahuā* had risen to

17¾ seers per rupee, as compared with 36 seers at the same time in the previous year. Still the anomaly of unexpectedly low numbers on works continued. The numbers on private relief works remained constant at about 3,500 to 3,600, while on the Government relief works the attendance averaged only about 2,750, the explanation being the departure of the people for their fields. The numbers relieved by cotton spinning, etc., slightly increased, and those on gratuitous relief numbered 2,400 at the end of the month.

Everything now depended upon the coming *bhadoi* and rice crops. Between the 15th May and the 26th June only 4½ inches had fallen, and the total fall up to the end of July was 6·70 inches below the normal (viz., 14·85 inches as against a normal of 21·55). The prospects of the winter rice began to be very gloomy, and prices, meanwhile, continued to rise; but the numbers both on the Government and zamīndāri relief works steadily fell off and by the end of the month only 1,943 persons remained at work, the explanation still being that all available labour was required for the fields.

By the middle of August rice was selling at less than 6 seers per rupee at one-half of the *hāts* in the district, and at half of these at 5 seers or under; the average rate for the whole district being only 5 seers 15 chittacks per rupee. These are prices that point unmistakeably to an almost complete exhaustion of the local stocks; and this remark applies not only to rice but to all other food grains, the general rise of which in price during the seven weeks from the 26th June to the 14th August will be seen from the figures in the margin. But by the end of August the time of need had passed. Full *bhadoi* and rice crops were by this time practically assured, and the *bhadoi* harvest had already commenced. Meanwhile, the numbers on the relief works had dwindled down to under 1,000 by the 28th August, while those on gratuitous relief had also decreased by several hundreds. Under the circumstances, and especially as the new crops were now coming in at much reduced rates, the relief operations were finally discontinued on the 31st August 1897.

	26th June 1897.		14th August 1897.	
	Sr.	Ch.	Sr.	Ch.
Wheat ...	8	7	7	0
Gram ...	9	0	7	3
Barley ...	10	2	7	0
Mahuā ...	17	12	12	8

Altogether 244,334 men, 190,137 women and 72,693 children, or a total of 507,164 persons reckoned in terms of one day, were employed on relief works during the famine, representing a

daily average of 0·32 per cent. of the population affected. The aggregate number in receipt of gratuitous relief from the 23rd January to 31st August 1897 was 131,883 men, 239,283 women and 82,775 children, making a total of 453,941, the maximum number of persons thus relieved being 4 per 1,000 of the population affected. The greatest difficulty in this famine was to secure the importation of supplies, and for this purpose Government sanctioned the payment of a bounty of 8 annas per maund of rice imported, and gave advances to enable merchants to purchase supplies. Under the bounty system the total importations into Palāmau from February to the end of August amounted to 14,227 maunds of Burma rice and 5,465 maunds of country rice. Government itself also imported about 15,000 maunds, when it was found in June that prices still rose to an alarming extent and that there was difficulty in procuring food for the labourers on relief works. The death rate during the famine was 36·40 as against 33·84 per mille, the average for the five previous years. No deaths were caused by starvation, and the excess over the average of the preceding quinquennium must be attributed to the results of privation, and the general weakening of the system caused by the consumption of jungle products without a proper mixture of more digestible food, which made the people more susceptible than usual to any form of prevailing sickness.

The famine of 1900 was far less severe than that of 1897, and there was this marked difference between the two that in 1897 Palāmau began the struggle with very little, if any, spare stocks in hand, whereas in 1900 it started with two bumper years behind it. The area severely affected was also far smaller, only one thāna, Mahuādānr, with an area of 502 square miles and a population of 26,153, being declared a famine area, though regular relief was given at the expense of Government in all thānas except Husainābād and Chattarpur in the north. The cause of the scarcity was the partial failure of crops which resulted from the unseasonable rainfall of 1899. In 1898-99 the total rainfall was normal and its distribution favourable, the consequence being that the outturn of all crops was good. In 1899-1900, although the rainfall was only 4·8 inches less than the normal, the distribution was disastrous. After preliminary showers in April and May, rain fell with ill-timed prodigality in June and July, and, though it benefited the winter rice crop, it seriously injured the chances of the *bhadoi* crops. The winter rice, which promised well in August, required good rain in September to ensure its coming to maturity; but the rainfall in that month was only 1·18

FAMINE OF 1900.

inches against a normal fall of 7·81 inches. Eventually, its outturn was only 32 per cent. In the months of October, November and December, in which light showers were wanted for the *rabi* cultivation, there was no rain at all, except ·37 inch in October; and the area cultivated was accordingly greatly contracted. At first, it was feared that even the small crop sown would be a total failure, and though this disaster was averted by timely rain in January, the outturn was no more than 43 per cent. The *mahuā* crop was also damaged by windy and cloudy weather in April and May and yielded an outturn of only 37 per cent.

The outturn of rice was, as already stated, only 32 per cent., and seeing that this crop is estimated to provide one-third at least of the year's supply of grain, it was evident that there was a serious deficiency in the food stocks. At the end of October 1899 Government sanctioned the opening of the reserved forests to the people for the collection of edible jungle products. Enquiry showed that many persons who were accustomed to two meals of rice daily were taking one meal of rice and one of *mahuā* or other jungle products; others were living entirely on jungle products. In many cases it was found that a villager had kept a small stock of grain for seed and was resisting the temptation to use it for food and subsisting on food collected in the jungles; and in many bazars *sāl* seeds were regularly sold for food. In November 1899 Government authorized the granting of loans in order to stimulate the importation of grain, and the immediate effect of this measure was to renew the activity of the traffic in grain, which was almost at a standstill.

The first distinct indications of the necessity of relief measures were observed in March at Mahuādānr, where the people were already in want of sufficient food, the food stocks being depleted, while the only supplies offered for sale at the *hāt* were obtained surreptitiously from the Sirguja State, exportation from which had been forbidden by the chief. By the end of March it had been found necessary to open test works in this and 5 other thānas, for the *mahuā* crop, which may usually be taken to be equivalent to a two months' supply of food, had proved a failure, while the mango crop had also everywhere been affected by blight, and in most places had completely failed. In May the price of common rice was as high as 6 seers 3 chittacks per rupee at Mahuādānr; and on the 19th May that thāna was declared a famine area. By the 31st May work had been opened on as many as 58 irrigation *bāndhs* in the numerous Government villages in the Daltonganj, Pātan and Lātehār thānas as well

as on 7 separate test works in the Mahuādānr and Bālumāth thānas. Seven kitchens had also been opened by the end of June in Mahuādānr thāna, at which a daily average of 379 persons were fed; and subsequently 19 more were opened in different parts of the district. With the harvesting, however, of the *bhadoi* and the promise of a good winter rice crop, the numbers on relief works continued to fall steadily from the last week in July. During the week ending on the 11th August there were only 1,005 persons at work, and by the end of August the number had been reduced to 616. All works classed as famine works were then finally closed, any remaining open after that date being carried on by the District Board or maintained as works of improvement in the Government estate. The kitchens were kept open until the 8th September, when they were all closed.

The total number of labourers on test and relief works in Mahuādānr, reckoned in terms of one day, was 27,991, and the total number on test works in other parts of the district was 191,749. The death-rate from October 1899 to September 1900 was 47·81 per mille, as against 35·56, the average of the preceding five years. This high mortality was partly due to a severe epidemic of cholera, and may perhaps be partly explained by the fact that the period of distress was preceded by two years of good crops, fair general health and a normal death-rate, in which a large number of persons of low vitality must have maintained their existence, who were unable to survive in a period of scarcity or disease.

PRIVATE RELIEF.

In concluding this sketch of the famines of Palāmau, reference may be made to some special features by which they have been distinguished. Among these, first place must be given to the efforts made by the zamīndārs to alleviate distress. On this subject, the following remarks recorded by the Commissioner in the Final Report on the Famine of 1896-97 may be quoted :—" The conduct of the Palāmau zamīndārs was, with a few exceptions, in striking contrast to that of the generality of the landlords of Hazāribāgh and Lohārdagā. It is true that in Palāmau the scanty population and the consequent competition among landlords for tenants gives a direct incentive to the landowners to treat their ryots well; but it would be very unjust not to attribute the action of the Palāmau zamīndārs, in the main, to higher motives. Living on their ancestral estates from father to son, in a secluded part of the country, they are much more in sympathy with the feelings of the people about them than is usually the case with the landlords of other more advanced districts. Very few of them are men of large means, but their manner of life is simple without extravagant

habits, and they feel no necessity to rack-rent or screw their ryots. The readiness with which they came forward as a body to take advances from Government for relief works has already been noticed. But besides this, many of them spent, for them, large sums of money in constructing irrigation *bāndhs* in their different villages. The Deputy Commissioner found himself supported in all his work by nearly the whole body of landlords in a manner that was not approached in any of the other districts."

To this it may be added that in 1900 the leading zamīndārs showed the same liberality and public spirit as during the preceding famine.

RELIEF WORKS.

Another noticeable feature of the famines of Palāmau is the aversion of the people to employment on test and relief works, to task work in any form, and to payment by results. Thus, in the famine of 1897 the number of persons attending relief works was remarkably small, notwithstanding the depletion of the food stocks, and the unprecedently high prices of food grains. It was found that the people allowed themselves to waste away into mere skeletons, rather than earn subsistence at the works. So long as the jungle products were plentiful and of a sustaining kind, matters went fairly well with them; but once the stock of such products began to fail, and the price of rice reached 5 and 6 seers per rupee, they began to suffer in an extreme degree. This aversion to relief works has been attributed to the fact that the people of Palāmau resent supervision, are indolent to an extreme degree, and will not make any exertion to help themselves, if such exertion necessitates their having to put their hands to work to which they are not accustomed; but there can be no doubt that the strong dislike to anything in the shape of task-work is engendered by the independent and free life to which the aboriginal and semi-aboriginal tribes are accustomed, and especially to their being able to sustain life, at a pinch, for weeks together on berries and roots, without being obliged to have recourse for their daily food to any form of unwonted labour. It is this feature which especially distinguishes the course of famines in Palāmau. In the generality of Bengal districts during a time of famine, the population flock to the relief works, and the question of feeding them is merely a matter of administrative arrangement. But in Palāmau the difficulty is to induce the people to accept relief in the form of task-work at all. They are accustomed in ordinary years to supplement their wants from forest fruits and roots, and their strong impulse during a time of scarcity is to resort more than ever to the jungles for food. The result, in time,

of an unmixed diet of this kind needs no demonstration. The Bihār relief-worker, when the famine is over, may be finely drawn, but he has been fed on wholesome food. His jungly fellow-sufferer finishes up equally thin, but with an impaired digestion and his system broken down.

CHANGE OF CONDITIONS. In conclusion, it may be mentioned that the liability of the district to famine has been much diminished since the advent of the railway in 1902. Prior to that date the district was terribly isolated, communication by railway, water or metalled roads being almost non-existent. The only merchants who could import grain were merely petty bazar *baniyās* accustomed only to deal in bullock-loads with the surrounding villages, and in no case extending their operations beyond the adjoining districts and States. Throughout the famine of 1897 the absence of means of transport, of metalled roads, and of navigable rivers made it a matter of the greatest difficulty to throw supplies into the district, in spite of the bounties and advances made to merchants. When Government decided to import rice, it was found that sufficient carts were not procurable for the purpose of forwarding it from Gayā to Palāmau; and, the rainy season having set in, the roads had become nearly impassable. It was decided therefore to send the rice to Bārun and thence by boat to Daltonganj up the Son and Koel rivers, but this latter means of transport also proved a failure, owing to the scanty rainfall in July and August which kept the rivers at an unnavigable depth. The rice could only be brought up from the Son by transhipping it into smaller boats for the voyage up the Koel, and the result was that the first batch of boats took three weeks to reach Daltonganj. Owing to the construction of the railway, this inaccessibility has now become a thing of the past, and there is no reason to suppose that Palāmau will again be cut off from supplies in a year of scarcity.

PROTECTIVE MEASURES. The railway has done away with the fear that, in the event of the local crops failing, seed and stocks of grain could not be sent into the district; and thus affords protection against the worst effects of famines. Of minor protective measures the most important is the development of the system of indigenous reservoirs called *bāndhs* or *āhars* described in Chapter VI. "It is," remarks a former Commissioner, "to a multiplicity of village *bāndhs* that we must look as famine protective works, and not to any large scheme of irrigation, practicable enough in a level country, but practically impossible, except at an altogether prohibitive cost, over a broken and undulating area." At present, the great weakness of this system of reservoirs is the precariousness of the supply, for a local failure of the rains means either empty *āhars* or a very

inadequate supply. It follows therefore that the larger the stream or river tapped to replenish them, the greater and more certain is the security of the crops; and fortunately much has been done to increase the efficiency of the existing *bāndhs* by feeding them by means of small channels and of weirs across the hill streams. Of more ambitious projects seven may be mentioned, which will give some protection to 200 or 300 villages. Two consist of building weirs across the rivers Nadaurā and Piri, tributaries of the Amānat, and of constructing distributary channels; the third is for a weir across the Sadābah, a tributary of the Koel, with a distributary channel; two are for the construction of two small reservoirs at Pokhrāhā and Dhāwādih; the sixth is a project for damming the Harhgarhwā, a stream near Leslieganj; and the seventh provides for the supply of water from the Kararbar, a tributary of the Son, by means of a weir and distributary channels. The Nadaurā, Pokhrāhā, and Harhgarhwā schemes are complete, and the Sadābah scheme is in course of completion. The Kararbar project, a more ambitious scheme, which will irrigate about 100 villages in *pargana* Japlā, has been sanctioned, but is in abeyance. The difficulties encountered in connection with this last project were very great, for capital was non-existent and there were some 200 to 300 proprietors, many absentees, all of whom had to be convinced of the necessity of the scheme and induced to co-operate for the common good. After much effort, they were induced to sign a joint bond under the Land Improvement Loans Act in favour of the Deputy Commissioner and to entrust the work to the District Engineer. On similar lines, the *jāgīrdārs* have been induced to undertake several projects for the protection of villages on their estates, each giving protection to from 2 to 100 villages; and the result has been to reduce the liability of the country to crop failures.

CHAPTER VIII.

RENTS, WAGES AND PRICES.

IN the district, as a whole, the rates of rent paid by tenants vary according to the nature of the land cultivated, its situation and the means available for irrigating it. The best rice land fetches Rs. 10 to Rs. 15 an acre in parts of Garhwā and Pātan thānas, Rs. 6 in the Government estate, and Rs. 4 in the south of the district. Sugarcane is a comparatively new crop, but in some places, where differential charges are imposed for land growing this crop, Rs. 10 an acre is often given; in the Government estate no extra rent is charged for land under this crop. The best *bhadoi* and *rabi* lands only fetch Rs. 6 to Rs 8 an acre, while in the Government estate the maximum levied is Rs. 3. Lands of inferior qualities let at a greatly reduced rent. The maximum rent for rice lands in the Government estate is Rs. 6 and the minimum 8 annas, while for *bhīta* or dry lands the maximum is Rs. 3 and the minimum one anna per acre. Generally speaking, the difference between the Government estate and ordinary estates is that the maximum rent levied in the former is less and the minimum greater than in the latter, where the rates charged are justified by the fact that though the cultivator is liable to suffer habitual loss in the poorest lands, he is amply compensated by the finest rice lands regularly yielding a large profit. CASH RENTS.

In the Government estate, which extends over an area of 425 square miles, or nearly one-eleventh of the entire district, the last settlement of rents was made in 1896. For the purposes of assessment, the land under cultivation was divided into 3 classes, viz., homestead land, *dhankhet* or rice land and *bhīta* or uplands, and each of the two latter were subdivided into three classes. First class *dhankhet* is the lowest land on which most water remains, and which is, therefore, best suited for winter rice. The other two classes possess the same character, but in lower degrees, second class land being at a slightly higher level than land of the first class, while third class *dhankhet* is still higher. First class *bhīta* lands are the uplands in which *bhadoi* or autumn rice, wheat, barley, maize and sugarcane are grown; this class also includes the Rents in the Government estate.

dūb land lying within the basins of the embankments called *bāndhs* or *āhars*. Second class *bhīta* are lands which yield *maruā*, linseed and gram; third class *bhīta* are lands which generally produce *tīl* (gingelly), cotton and pulses, and include *tānr* or waste uplands, which are cultivated once in 3 or 4 years. This classification appears to be understood by the more intelligent ryots of the higher castes, but the bulk of the people cannot grasp the distinction between the different classes.

The ryots were classified into settled, occupancy and non-occupancy ryots in accordance with the principles of the Tenancy Act, although that Act is not in force in the Chotā Nāgpur Division. Besides the admission of occupancy rights, all the ryots, whether rent-paying or not, were for the first time specifically given *mahuā* trees free of rent at the rate of 2 trees per ryot in the northern and 4 trees in the southern villages. The resident ryots were also allowed to hold their homestead lands rent-free to the extent of 5 *kathās* or one-fifth of an acre, according to the custom of the *pargana*. The average rent per cultivated acre for each class of tenant was:—settled ryots, Re. 1-3; occupancy ryots, Re. 1-6-1; and non-occupancy ryots, annas 14-7. The total incidence of rent per cultivated acre was only Re. 1-2-3, but in fixing the rates, Government was influenced by the consideration that Palāmau was still in a backward condition, partly owing to the absence of railways and the vicissitudes of the rainfall.

Rents for trees.

Besides the rent paid for land, the ryots of the Government estate pay rent for trees, viz., *mahuā*, *āsan*, *khair*, *palās* and *kusum* trees. The flower of the *mahuā*, dried and preserved, forms a valuable article of food for the lower classes; and those trees in excess of the number allowed to the ryots free of rent were settled for the period of the settlement (15 years) at 4 annas per tree in the northern villages and at 2 annas in the southern villages. *Asan* trees, which are used for rearing silk cocoons, are settled annually with the rearers of cocoons at a rental of Rs. 8 to Rs. 12 per *hasuā*, *i.e.*, the sickle with which they carry on their work. *Khair* trees are used for the manufacture of *kath* or catechu and in growing lac, as well as for house posts and ploughs and for making charcoal. The Deputy Commissioner was left free to settle these trees from year to year to the best advantage. The system adopted is to lease a forest to a contracting *mallāh*, who has to pay so much for each jar he keeps at work. As regards *palās* and *kusum* trees, which are used in growing lac, such trees as are entered in the ryots' names in the *khatiāns* as being in their possession are settled with them separately at fixed rates for definite periods. Only those trees are assessed to rent on

which lac is cultivated. The claim to assess self-sown trees, even on cultivated lands, has now been made in the *jāgīrdāri* villages on the analogy of the Government estate, and to a great extent has been admitted.

At this settlement the rental was increased from Rs. 57,693 to Rs. 74,433 or by 29 per cent. The increase in rent is due chiefly to the extension of cultivation, which may be ascribed to the large addition that has taken place in the number of tenants and in the number of reservoirs in the estate. The great rise in the prices obtained by cultivators for their produce, the opening out of the estate by new roads, the establishment of new markets, the consequent facility with which crops can be disposed of at higher rates, and the clearance of jungle are all causes which have attracted new tenants to the estate, and thereby caused extension of cultivation and justified an increase in rent. **Enhancement of rents.**

Outside the Government estate, the rent that can be realized from tenants varies directly with the arrangements made for constructing new irrigation works, the maintenance of those already existing, and last but not least the policy pursued by the landlord. The tenants nominally have their rights assured them under the Chotā Nāgpur Tenancy Act; but in its practical working the Act is almost a dead letter. The landlord very soon learns from his deserted holdings that a policy of oppression and rack-renting is not one which conduces to his profit in the long run; and if he endeavours to raise his rent-roll by these methods, the tenants, being still of nomadic habits, simply move on to the nearest village, where they are wanted. In fact, as long as the present competition for tenants continues among the landlords, the law of supply and demand will suffice to prevent excessive enhancement of rents. The result is that by custom every ryot who pays the village rate of rent regularly has a right of occupancy.

Regarding the rents of trees and other miscellaneous rents, the Deputy Commissioner writes as follows:—"Probably the most difficult question in the district is the right to rent for lac-producing trees, and the rate which may be exacted. The landlords have taken their cue from the Government estate and claim to assess all trees. It seems clear that they have a right to assess trees which are not within a ryot's holding, but ryots have in some cases deeply resented the claim to raise the rate gradually from Rs. 2 per 100 trees to 10 annas per tree, or half the lac (*ādhbatai*), if the cultivator prefers it. The ryots claim the right to cultivate lac on the trees in their own holdings, and at a privileged rate which the zamīndārs are not willing

to concede. In some cases the zamīndārs have actually threatened occupancy ryots, who declined to allow *palās* seedlings to grow in their lands, but it would appear that trees thus reared would be the ryot's property and not liable to the cess any more than planted trees or trees on homestead land. *Mahuā* and mango trees on holdings are not generally assessable to rent. By custom, tenants have in most parts the right to graze their cattle in jungle and waste and in fallows, without restriction, free of charge. In other parts a grazing-fee of *ghī* is taken. As regards jungle produce, tenants are entitled to take fuel free of charge from the estate, without the landlord's consent, but timber and other materials for building only with the landlord's consent, except in jungle and aboriginal villages, where they may take them without his consent. Some zamīndārs have begun to reserve their forests after the manner of Government. They reserve the timber of all valuable trees and take fees for timber from the ryots of the village where the jungle is situated."

PRODUCE RENTS.

In the portions of the district adjoining South Bihār, especially in *parganas* Belaunjā and Japlā, rents are paid in kind under what is known as the *bhāoli* system in contradistinction to the system of payment in cash which is known as *nagdi*. Where lands are held under the *bhāoli* system, the rent to be paid is determined either by *batāi* or a division of the crop or by *dānābandi* or appraisement of it before it is cut. The landlord and tenant each take the share (or its value) to which they are entitled by the custom of the village, which is reported to be practically always half and half, after the customary payments to the *pātwāri*, weighman, etc., have been made.

If *batāi* is in vogue, the crops are divided on the threshing floor; this is also called *ādhbatai* from the landlord and tenant each getting half the crop. Under this system, the landlord has to keep a careful look out that he is not defrauded of some portion of his share; in fact, from the moment the crop is ripe and fit to cut up to the time it is weighed on the threshing floor, he has to keep watch night and day to prevent being defrauded.

If the rent is assessed on the *dānābandi* system, an appraiser (*shudkār*) is sent to the land to estimate the value or outturn of the crop when it ripens. After he has made his estimate a village *panchāyat* called *danbhākā* is appointed, partly by the landlord and partly by the ryots, the members of which visit the land accompanied by a *kathmārā* or measurer, and by the *patwāri* or village accountant or some other writer. They pass regularly from field to field measuring and estimating the crops, the *patwāri*

recording opposite each ryot's name the amount or weight of grain estimated, and the share he has to pay to the landlord or person entitled to the rent, all village dues, which by custom are payable by both parties, being deducted from the quantity estimated. If no agreement is come to, the tenant cuts a certain area where the crop is poorest and the landlord where it is best. The produce of both plots is then measured, and the average thus determined is accepted. After the whole has been completed, each ryot is furnished with an abstract, called an *utārā*, showing him exactly how much grain he has to deliver, and when the crop is harvested, he has to make over that amount or its equivalent in cash to the landlord. Where there is no collusion, the estimates are pretty accurate; but sometimes the members of the *danbhākā* have a private understanding with the cultivators, and very frequently they are the paid creatures of the landlord, especially the small rent receiver, so that the working of the system furnishes many opportunities for fraud. Sometimes, moreover, an oppressive landlord will insist upon the crop rotting in the field if the cultivator does not accept the appraisement he desires. It is true that the tenant by customary right may take the crop, but he knows that, if he does, he will be sued for an impossible rent probably calculated on a very high average for a series of good years.

SYSTEM OF ASSESSMENT.

There are three systems by which land is assessed to rent, viz., the *utakkar*, the *pariādāri* and the anna or *kanwā* system. *Utakkar* is the ordinary system of assessing each *bīgha* of land at a certain rate of rent, according to its classification; this system is in vogue both in the Government estate and in private estates in the north of the district. A considerable part, however, of the population consists of aboriginal tribes who are not accustomed to this system; and in the jungly villages lying chiefly to the south of the district the system adopted is that known as *pariādāri*, under which the tenants hold a certain portion of the village rice lands, to which are added a due proportion of homestead land and a so-called proportionate, but really indefinite quantity of *tānr* or waste lands. This system is based on unwritten custom, and is the only one the aboriginal tribes understand or appreciate Its basis lies in the division of the village cultivated lands, generally the low lands fit for paddy, into a number of *pariās* or shares, each of which comprises the same quantity of the different kinds of land under cultivation and bearing the same rate of assessment. Each *pariā* carries with it the right to cultivate a corresponding proportion of upland free of rent, but in practice all idea of proportion tends to disappear, and the cultivators, whether of one or more *pariās*, assume the right to cultivate as much upland as they choose.

Provided they have the *pariādār's* consent, there is nothing to prevent cultivators coming to reside in a village and taking up a little rice land or a fraction of a *pariā*, for which they pay a nominal rent, simply in order to cultivate a large area of upland which they prefer to the laboriours cultivation of rice.

The *kanwādāri* system, strictly speaking, is the division of the entire village area into sixteen annas or *kanwās*, each holder of a *kanwā* having a right to a sixteenth of the village area, including cultivation and waste. This is the theory, but in practice it has been much modified, except where the holders of the *kanwās* are not only ryots but also shareholders; otherwise the *kanwā* division, as a rule, extends only to the lands actually under cultivation, the landlord or farmer assuming, when he can, the right to lease out other lands and to settle new cultivators on them. In some cases the standard adopted is the area of rice land which a man is able to sow with a maund of rice.

WAGES.

For some years past the wages paid for labour have been in a state of transition, owing first to the construction of the railway, and subsequently to the inter-communication with the centres of industry outside the district which has followed its completion. In the case of skilled labour, there has been a general increase, which is very marked in the case of masons, carpenters and blacksmiths. An expert mason or carpenter who earned 8 annas a day 10 years ago, now gets 12 annas a day; and in the same period the daily wages of a common mason have risen from 5 annas to 6 or 8 annas, and those of a common carpenter from 5 annas to 7 or 8 annas. The most skilful blacksmith now earns 14 annas per diem as against 10 annas, and the common blacksmith 8 annas as compared with 7 annas a decade ago.

The price of unskilled labour has also risen considerably in the headquarters station, where the cooly's daily wage now varies from 3 to 3½ annas a day as compared with 2 to 3 annas ten years previously; but in the villages the wages of labour remain much the same from year to year. Here the labour is still paid largely in kind and is therefore not much affected by the rise in the price of food-grains.

Kamiyās.

Among these labourers may be mentioned the *kamiyā*, who is found in almost every village. The *kamiyā* is practically a serf, who binds himself to work for a master in consideration of an advance of money. He is obliged to remain in the village and work for his master, as long as the loan remains unpaid; and in return he is either provided with free quarters or given materials to build a hut for himself and his family; he also

receives 5 *kathās* of rice land, the same quantity of upland, the seed with which to sow them, and the use of his master's plough. His wife and children have to make good his absence, if he is prevented from working, and if he dies, the debt becomes due from his widow. He ploughs and does all field work for his master, and is paid in kind at the village rate for every day he works.

The same system of payment in kind obtains in the case of the *pānchpāoni*, *i.e.*, the five village officials common to almost all villages, viz., the blacksmith, carpenter, barber, washerman and potter. The blacksmith and carpenter, who by immemorial custom are bound to make and repair all agricultural implements and domestic utensils of iron and wood, find their own tools and all materials, such as coal, etc., necessary for performing their work, while the villagers supply the raw materials. Each of these artisans is paid at the rate of one *kachchā* maund, *i.e.*, nearly three-quarters of a *pakkā* or standard maund of grain a year, in addition to 3 seers of grain in Asārh (June-July) and a sheaf of the *kharīf* or winter rice and *rabi* crops. Village servants.

The barber, who is bound to shave and crop each client thrice a month, is paid 18 seers (*kachchā*) of grain a head, in addition to a sheaf of paddy in Aghan (November-December) and of some *rabi* crop other than wheat. He also gets gratuities when births occur in the villages, the amount being determined by sex, for if a boy is born, he receives 4 annas, and if a girl is born, only 2 annas. He is paid at the same rates when deaths occur, and gets an allowance of rice (5 and 2½ seers respectively) on both occasions. The washerman, who is usually paid in cash for washing the villagers' clothes, is similarly paid 4 annas at the birth of a male child and 2 annas at the birth of a daughter, and also gets the same allowance of rice. The potter is paid in kind from Aghan (November-December) to Chait (March-April), and in cash during the remainder of the year, the amount of remuneration depending on the vessels supplied.

Another important village official is the *baigā*, who is responsible for propitiating the minor gods and spirits. He is usually given a small rent-free tenure and also receives 3 to 6 *kachchā* seers of grain from each ryot in Chait and Aghan. The fowls and goats given as offerings to the spirits are his traditional perquisites, and besides these, he receives a number of gratuities in cash or kind at different periods of the year.

The density of population being very small, there is a certain scarcity of and competition for tenants, and in ordinary years the whole population finds ready employment. There is only Supply of labour.

one concern employing a large labour force, viz., the colliery at Rajharā, which has no difficulty about its labour supply owing to its isolated position and the consequent absence of competition. Here nearly all the coal cutters are Nuniyās from Gayā, the remainder being local Nuniyās, Cheros, Dosādhs, Mallāhs and Bhuiyās. The rate paid is $4\frac{1}{2}$ annas a tub, plus 2 pice if the minor works for 6 days in the week; and surface labourers are paid 3 annas a day. The average daily wages earned are—men 4 to 8 annas, women 2 to 4 annas, and children $1\frac{1}{2}$ to 3 annas. The total labour force employed consists of 850 persons, of whom 550 work below ground and 300 above ground.

It is reported that the recent boom in lac has affected labour considerably. *Kamiyās* have deserted their masters in large numbers, and having made what are for them small fortunes in lac producing refuse to return. The result is that Brāhmans and others are hard put to it to get cheap agricultural labour.

CES.

The marginal table shows the average price of staples in seers per rupee during the last fortnight of March since the creation of the district. It will be evident that during the 15 years to which the figures relate the price of food has risen considerably with two noticeable exceptions, viz., maize and salt; the price of the latter has fallen owing to the reduction of the salt tax. It must be remembered, however, that there are many people in the district who live to such a large extent upon jungle fruits that they are little affected by the rising price of grain, and specially of rice.

Years.	Common rice.		Wheat.		Gram.		Maize.		Salt.	
	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
1891–1895	15	5	15	14	19	2	14	8	8	9
1896–1900	13	7	13	9	18	0	18	5	8	10
1901–1905	12	8	11	3	15	10	20	11	11	4

TERIAL DI- N OF PLE.

The following remarks regarding the material condition and indebtedness of the people are quoted from Mr. Sunder's Settlement Report :—

"Roughly speaking, the people are certainly better off than at the last settlement. Thirty years back there was no road to Sherghāti, and important marts were reached with great difficulty; the road to Rānchi also was then only under construction. Crops and other produce could not be disposed of with facility. Prices were consequently low, and the people were obliged to deal with the *mahājan* alone. He fixed rates and flourished over his profits, while they remained poor. Now all this has been changed. The district is fast opening out. Many good roads have been made and others are under construction. There are more markets now,

and while *mahājans* and European agencies compete in the purchase of grain and other produce, the people have little difficulty in disposing of all they wish, and often at good profits. Their own habits have also changed and are changing with the times, inasmuch as the majority of them, from the humble Birjia, Parhaiyā and Korwā to the proud Rājput, Chero and Brāhman, may now be seen wearing clothing made of English material, whereas formerly they wore what Jolāhas weaved for them. And there is also scarcely a family now in which brass utensils are not used in place of leaf plates and wooden drinking cups.

"That some of the people are in debt is certainly true. In a country where it is looked upon as a duty to procreate heirs on the earliest practicable date, irrespective of the means for supporting the family when it arrives, temporary dependence on others for food and raiment is unavoidable in the case of a large number. Absurdly disproportionate marriage expenses and the general improvidence of the ryot, particularly among the Cheros, Kharwārs, Urāons and Bhuiyās, preclude his hoarding up any surplus. Perhaps a bad season intervenes, and he can no longer pay his rent without recourse to the village *sāhū* or *mahājan* (money-lender). No doubt this individual, who is a much, and, in my opinion, generally a very wrongfully abused person, will charge him high interest, will lend grain at one rate, and insist on repayment at a higher rate, irrespective of market prices: in fact, will make as much profit as he can out of the transaction. All these facts are familiar from many highly-coloured pictures. But there is another side to the question: the money-lender's chances of loss are often very great, and the periods of credit are generally long. He will only realize, when he knows there is something to be got from the grain or earnings for the moment in the ryot's possession; he will help in the maintenance of the ryot's holding, for, that gone, he has little hope of realizing his principal. Ryots, however, in bad years abscond to Assam, the Duārs, and other districts. In the course of time the ryot who borrows may be sold up and forced to work as a labourer or *kamiyā*; but this is what might have happened to him at a much earlier stage, if he had not been lent money by the *sāhū*, whom he dislikes with all the intensity of feeling that a borrower always has towards the person to whom he is under an obligation for temporary assistance. The *mahājan* or *sāhū* has perhaps not many admirable qualities, but his existence is essential to the future progress of the ryot who started with no capital, and must from time to time, as seasons vary, require external aid to help him in the upkeep of his holding."

Indebtedness.

To this it may be added that the policy inaugurated in late years of promoting irrigation works and making advances under the Loans Act has greatly increased the prosperity of the ryots, so that the desertions alluded to are now far less frequent; in 1904-05 only 20 holdings were deserted in the Government estate, whereas the number in 1900-01 was 556. The Bārun-Daltonganj Railway was, moreover, opened in 1902, thus bringing Palāmau into direct communication with Northern India and Bengal; and this has given a great stimulus to trade and commerce and been productive of very beneficial results to the people of the district.

CHAPTER IX.

OCCUPATIONS, MANUFACTURES AND TRADE.

ACCORDING to the census of 1901, agriculture supports no less than 72·3 per cent. of the population, while 11·7 per cent. are dependent on various industries, 0·8 per cent. on the professions and 0·3 per cent. on commerce. Of the persons who obtain their livelihood by agriculture 58 per cent. are actual workers, and these include 4,000 rent-receivers, 145,000 rent-payers and 109,000 labourers. Of the industrial population 59 per cent. are actual workers, including 6,000 weavers and numerous iron-smiths, potters, shoemakers, and basket and mat-makers. Of the professional classes 54 per cent. are actual workers, while among those engaged in other occupations are 7,000 herdsmen and 38,000 general labourers. OCCUPATIONS.

The preponderance of those who subsist by agriculture is very marked, for, apart from those actually engaged in or dependent on cultivation, there are few even of the upper and middle classes, whether private gentlemen, money-lenders or shop-keepers, who have not some land. It is, indeed, estimated that if systematic enquiries were made, it would be found that there are not more than 10 per cent. of the population without some connection, direct or indirect, with agriculture.

The manufactures of Palāmau are of little importance, both because it has until recently been an isolated tract almost entirely cut off from the outside world, and because the bulk of the population is engaged in agricultural pursuits. Another, and scarcely less important, reason for this industrial backwardness, is that a considerable proportion of the people consists of aboriginal tribes, content to live on the produce of the chase, the fruits and roots found in the forests, and a few hardy crops. Practically, the only large industry consists of the exploitation of coal; and this is only conducted on a limited scale, large coal-bearing areas still remaining untouched. MANUFACTURES.

The most important coal-field is that known as the Daltonganj field which lies partly in the valley of the Koel river and partly in that of the Amānat, extending over a distance of 50 miles Coal mines.

from east to west. Its total area is nearly 200 square miles, but this statement of its size conveys an erroneous idea of its value as a coal-bearing tract, for coal-bearing rocks occupy an area of only about 30 square miles in the valley of the Koel. The eastern extremity of the field is near the village of Loharsi, the western extremity is probably a mile or so beyond Garhwā; and Daltonganj lies just beyond its southern border. This field contains a large quantity of fuel fit for locomotive and steaming purposes, and also of good brick-burning and lime-burning coal, to be got at comparatively shallow depths. *In addition, there are many millions of tons of coal not considered useful for locomotive or general steaming purposes, but which may be considered an ideal fuel for domestic purposes, as it ignites readily, burns easily, and* leaves a white ash similar to wood.

Rajharā colliery.

The field was worked at Rajharā and Panduā by the Bengal Company for some years before the Mutiny of 1857, but the works being attacked and destroyed by the rebels, it was abandoned in that year. Subsequently, a small quantity of coal was extracted for the supply of the irrigation works at Dehri and also of some of the nearer towns in the vicinity of the East Indian Railway; and towards the end of the 19th century the seams at Singrā were worked to a small extent. It was not, however, till the Bārun-Daltonganj railway tapped the field in 1901, and brought the coal within reach of Cawnpore and other manufacturing centres in the United Provinces that work on a large scale was undertaken. In that year the Bengal Coal Company commenced systematic operations at Rajharā with an output of 3,881 tons, the production rising to 33,557 tons in 1903. In 1906 the output had increased still further to 86,768 tons. Two pits, 178 and 165 feet deep, are being worked, and one incline with a depth of 110 feet. The labour force employed consists of 850 employés, of whom 550 work below ground and 300 above ground. The coal-cutters are recruited mainly from Nuniyās, Cheros, Dosādhs, and Mallāhs, while a few are Bhuiyās. They are paid at the rate of $4\frac{1}{2}$ annas a tub; a man and his wife can, it is said, cut two tubs a day easily and three if they bestir themselves. There are 2 shifts a day and one night shift. Surface labourers are paid 3 annas per diem and allowed 2 hours off in the middle of the day.

Aurangā coal-field.

Besides the Daltonganj field, there are three coal-fields not worked owing to their inaccessibility, viz., the Hutar, Aurangā, and a portion of the Karanpurā field. The Aurangā coal-field extends over an area of 97 square miles along the course of the river of the same name in the south-east of the district. It contains numerous coal seams, some of large size, and the total

quantity of coal available has been estimated at 20 million tons, but the fuel is of indifferent quality. The following remarks regarding the value of the coal are quoted from an article on the Geology of the Aurangā and Hutar coal-fields by V. Ball (Memoirs, Geological Survey of India, vol. xv) :—"The coal which occurs in the rocks of the Rānīganj group is of too unimportant a character, whether as regards quality or thickness, to be considered as affecting the question of the amount economically available in this area. The improbability of this field containing a large supply of really good coal is very great. The appearance of the seams, and the result of the assays, both point to this conclusion. At the same time, it should be remembered that there is not a single fresh and clear section of the rocks and that the coal has never been quarried to the smallest extent."

The Hutar coal-field, which extends over an area of nearly 79 square miles, lies to the south of Daltonganj and west of the Aurangā river and is traversed by the Koel flowing from south to north. Regarding the quality and quantity of the coal in this field, Mr. Ball has written as follows:—"The coal-measure rocks of this area present many striking differences from those of the Aurangā field. To this rule the coal is no exception, as will at once be apparent by a comparison of the average assays. From the Daltonganj coal that of Hutar differs in containing a notably smaller proportion (7·15 per cent.) of fixed carbon, and would, therefore, have a less heating power. The proportion of ash, 10·7 per cent., is the same in both. On the whole, however, the Hutar coal is quite equal to the average of Indian coals, so far as regards quality. Much uncertainty must attach to any estimate of quantity. Only three seams of good quality, containing a thickness which could be worked with profit, are known to exist. I do not at all despair of this field being found to contain workable seams of value, but the facts at present available do not justify any confident expression of opinion that such will certainly prove to be the case."

Hutar coal-field.

A small portion of the Karanpurā coal-field is situated at an average distance of 6 miles from the Aurangā field in the extreme south-east of the district. Like the two fields described above, it has not as yet been worked.

Karanpurā coal-field.

Iron ore is found in many parts of the district, and in particular in the neighbourhood of the coal mines. There are no deposits of importance within the limits of the Daltonganj coal-field, and though there are numerous deposits in the Hutar field, it is believed that none are sufficiently extensive to justify the hope that the establishment of iron works there would have a favourable

Iron.

result. In the Aurangā field and its neighbourhood, however, there is an undoubted abundance of good ore, which is favourably situated as regards limestone flux, if not as regards fuel.

Iron smelting.

Iron ore is plentiful in the south, where it is smelted by the aboriginal tribe known as Agariās. The following is a description given by Mr. Ball of the primitive process of smelting practised by them:—"The furnaces of the Agariās are generally erected under some old tamarind or other shady tree on the outskirts of a village or under sheds in a hamlet where only Agariās dwell, and which is situated in convenient proximity to the ore or to the jungle where the charcoal is prepared. The furnaces are built of mud, and are about 3 feet high, tapering from below upwards, from a diameter of rather more than 2 feet at base to 18 inches at top, with an internal diameter of about 6 inches, the hearth being somewhat wider. Supposing the Agariā and his family to have collected the charcoal and ore, the latter has to be prepared before being placed in the furnace. Three varieties of ore are recognized, viz., *bāli*, *i.e.*, magnitite, *biji*, *i.e.*, hæmatites from coal measures, *dherhur*, *i.e.*, hæmatites from laterite. *Bāli* is first broken up into small fragments by pounding, and is then reduced to a fine powder between a pair of mill-stones. The hæmatite (*biji* and *dherhur*) it is not usual to subject to any other preliminary treatment besides pounding.

A bed of charcoal having been placed in the hearth, the furnace is filled with charcoal and then fired. The blast is produced by the usual pair of kettledrum-like bellows, which are worked by the feet, the heels of the operator acting as stoppers to the valves. The blast is conveyed to the furnace by a pair of bamboo twyers, and has to be kept up steadily without intermission for from 6 to 8 hours. From time to time, ore and fuel are sprinkled on the top of the fire, the proportions used not being measured, but probably the operators are guided by experience as to the quantities of each which produce the best results. From time to time the slag is tapped off by a hole pierced a few inches from the top of the hearth. Ten minutes before the conclusion of the process, the bellows are worked with extra vigour and the supply of ore and fuel from above is stopped. The clay luting of the hearth is then broken down, and the ball or *giri*, consisting of semi-molten iron slag and charcoal, is taken out and immediately hammered, by which a considerable proportion of the included slag, which is still in a state of fusion, is squeezed out.

"In some cases the Agariās continue the further process, until after various reheatings in open furnaces and hammering, they produce clean iron fit for market; or even at times they work it

up themselves into suitable utensils. Not unfrequently, however, the Agariās' work ceases with the production of the *giri*, which passes into the hands of the Lohārs. Four annas is a common price paid for an ordinary sized *giri*, and as but two of these can be made in a very hard day's work of 15 hours' duration, and a considerable time has also to be spent on the preparation of ore and charcoal, the profits are small. The fact is, that although the actual price which the iron fetches in the market is high, the profits made by the *mahājans* and the immense disproportion between the time and labour expended and the outturn, both combine to leave the unfortunate Agariā in a miserable state of poverty.*"

The iron is made into axes, ploughshares, well-buckets and other agricultural implements, and also into guns, which are sold, according to the length of the barrel, at the rate of a rupee a span; the best guns are made at Hirhinj and Daltonganj.

Other minerals. Limestone, sandstone, laterite and graphite also exist, but difficulties of labour and transport have up till now prevented their being utilized. Copper has been found, but not in sufficient quantities to enable it to be worked profitably.

Cutch manufacture. Next to coal-cutting the most important industries consist of the manufacture of cutch, the rearing of cocoons and the propagation of lac. Cutch or catechu is the astringent resin extracted from the *khair* (Acacia Catechu) tree. The manufacture of this drug is carried on by Mallāhs, who come annually from Gayā and other districts for the purpose. The first thing they do is to choose a suitable site for an encampment in a locality where the trees are plentiful, and where water is to be had. As soon as a central spot has been selected, the whole party set vigorously to work to erect a sufficient number of huts for the shelter of each family. The work-sheds are then erected, and furnaces prepared by digging circular holes about 2 feet in diameter and 4 feet in depth, with a flue sloping down from above. The men are now daily in the forest engaged in cutting down the trees and lopping off the branches, after which the trees are taken to the encampment in lengths of 10 to 12 feet. As soon as the supply begins to come in, the women bark the trees and chop off the outer white wood, leaving the inner wood only The heart of the tree, which is of a dirty red colour and full of sap, is then cut up into small chips which are packed in large earthen jars called *chattis*. The latter are placed over the furnace or oven and their contents boiled from 12 to 16 hours.

* V. Ball, *The Aurangā and Hutar Coal Fields and the Iron Ores of Palāmau and Tori*, Memoirs of the Geological Survey of India, Vol. XV.

The juice (*ras* or *arak*) which boils over is poured into another jar, replaced on the furnace, and stirred till it attains the consistency of syrup. It is then poured off into a circular earthen vessel, and allowed to settle for a night, and next morning is strained through a large basket; the liquid portion thus strained off is poured into a ditch dug close by, and is made into second class cutch called *khairā*. First class cutch, called *pakhrā*, is made from the thick residue left which remains in the basket for about a month, during which it further thickens according to the temperature and the weather. The mass is next poured in a layer on the ground over ash, upon which it is kept for eight or ten days, during which it hardens. It is then cut up with a knife into squares, in which shape it is sold to the trader. Cutch can only be made during the cold weather. It fails to harden on hot days, and Mallāhs therefore close work before the end of March. The Mallāhs pay royalty to the zamīndārs according to the number of *chattis* or jars they keep in use, at the rate of Rs. 8 to Rs. 12 for each *chatti* for the entire working period. They have a firm belief that they must remain perfectly clean and pure during the whole time, or the cutch will be spoilt.

Cocoon rearing.

The following account of cocoon rearing is taken from the Monograph on the Silk Fabrics of Bengal by N. G. Mukerji (1903):—"Cocoons are farmed chiefly by Cheros, Mallāhs, Bhuiyās and Dosādhs, numbering from 400 to 500 families. The process is as follows. In the second fortnight of Kārtik a number of cocoons, generally about 100, are placed in a bag made of paddy straw and kept in a closed room, where they can get neither heat nor light. In the beginning of *Adra Nakshatra* in Asārh (about the beginning of July), the cocoons are taken out of the bag, strung on a rope and exposed to the cold. In from two to four days the moth emerges from the cocoons. The males, which are of a reddish colour, are called *phursa*, the female, which is yellow, being called *kir*. They are mated in pairs and kept from morning till about 4 P.M., when they are separated. The females are then fastened together in pairs, their wings being fastened with their fibres, to prevent them from flying. The pairs are gently shaken and placed in a basket, where they lay their eggs. The laying of eggs is generally finished by 7 P.M. In the morning the eggs are gently rubbed with the wings of the moths, the object being to keep them carefully cleaned. In the evening the eggs are put in small loth bags and exposed to cold during the night, being kept in a dark room during the day. The eggs are hatched by the eighth morning. The young silk-worms are then taken, stil

in the bags, to *āsan* trees. Small cups are then made of leaves of the *bar* tree, in which the silk-worms are deposited. The cups are then closed and fastened to leaves of the *āsan* tree, about 3 or 4 feet from the ground. The cups are most carefully made with the object of protecting the silk-worms from heat and rain. From now for 30 days the breeders follow a curious custom. They observe the strictest abstinence, not drinking any wine, nor eating meat, onions, garlic, tamarind or turmeric. They will not shave nor allow any women to touch them, and sleep only on mats.

"Three days after the cups have been fastened they are opened again. About one-third of the young worms are generally found dead; the rest are allowed their freedom on *āsan* trees. On the evening of the third day they become torpid, and after remaining 24 hours in this state, cast their skins (*kenchur*). They again become torpid in the evening of the fifth day, and after 48 hours in this state, again cast their skin. The process is repeated in six days, the period of torpidity on this occasion being 60 hours. The three stages are called *ekjari*, *dojari* and *tejari*. The period of 20 days from the time when the worms were first shut up in the leaf cups is called *bisauri*. In another day cocoons will be found all over the trees. By the 15th of Kārtik the cocoons are again collected; a sufficient quantity is left for breeding the next year, the rest being sold to *mahājans*.

"The rate is from Rs. 6 to Rs. 10 per lot of 1,200. This lot is called *khari* or *hajār* (literally 1,000) on the same principle, I suppose, as a "baker's dozen." The *jibanias*, as the breeders are called locally, pay the owners of the *āsan* trees Rs. 4-8 per sickle, viz., 8 annas as *khutkar* and Rs. 4 as *patkar*—*khutkar* and *patkar* being a royalty on branches and on twigs and leaves, respectively. The rent is calculated, not according to the number of trees occupied, but according to the number of sickles employed, *i.e.*, the number of labourers."

Since the above account was written, the landlords have raised the royalty to Rs. 8 per sickle, in consequence of the damage done to the trees and the large profits made by the lessees. It may be added that the reason ascribed by the cocoon rearers for their abstinence while the cocoons are reared is that they have found from experience that, if they are not abstemious, the cocoons will be spoilt and their business will fail.

Lac industry.

A large trade is carried on in raw lac, *i.e.*, a resinous incrustation, found on the twigs of certain trees, which is produced round the bodies of colonies of the lac insect. The latter subsists on the vegetable sap that it sucks up by means of a

proboscis from the succulent tissues of the tree. When the larvæ escape from the mother, they crawl about in search of fresh sappy twigs; and at the time of swarming, the twigs of trees infested with the lac insect will often be seen to assume a reddish colour, owing to the countless masses of minute larvæ that are moving all over them. Those that become fixed, at once proceed, in the process of digestion, to transform the sap sucked up by the proboscis and to exude from their bodies the resinous matter with which they become ultimately incrusted. At this stage, the twigs of an old tree with the insects on them are cut off and tied on a fresh tree, which it is proposed to bring under cultivation, as high up near the small twigs as possible. After a time, the insect crawls up the branches of the fresh trees, and piercing the bark at some place sufficiently soft, fixes itself down and commences to secrete lac. The quality of the lac thus produced depends upon the brightness of the colour and the thickness of the incrustation; this is often nearly an inch thick, completely encircling the twig.

In this district lac is obtained mainly from the *kusum* (Schleichera trijuga), *palās* (Butea frondosa) and *khair* (Acacia Catechu), that obtained from the *kusum* tree being the best. Recent experiments have shown that it may also be successfully produced from the *bair* (Zizyphus jujuba), the quality of the lac being scarcely inferior to that of *kusum* lac. In the case of the latter tree, the twigs are removed from the branches of the old trees and applied to those of other trees in January and February, and the crop is harvested in October and November. The principal crop of *palās* lac is obtained in April and May, the twigs on which the lac has formed being lopped off with an axe and the lac afterwards removed with a sickle. A part of the lac is left on the trees and is ready by October or November, when it is cut and sold as seed. In the south lac is cultivated by Orāons and others on the *khair* tree, the insect-bearing twigs of the *kusum* tree being applied in June and July and the crop harvested in October and November. The raw lac thus produced is sent to the agencies of Messrs. Jardine, Skinner & Co. at Shāhpur opposite Daltonganj and at Lātehār, and is exported thence. The most important markets for lac are Nāwāgarh, Garhwā, Chainpur, Tarhasi and Daltonganj.

Recently, there has been a boom in lac, which has done much to save the old zamīndārī families, their income being, in some cases, more than doubled. Incidentally, the result has been that landlords now claim that lac trees, exclusive of planted trees and trees on homestead land, are their property, the claim

being apparently based on the analogy of the Government estate, where lac trees, even on cultivated land, have been assessed to rent.

Other industries. The only other important industries consist of the curing of hides and the manufacture of *ghī* (clarified butter) and *gur* or molasses, which are exported in considerable quantities. With these exceptions, the industries of Palāmau are of no commercial importance, the artisans being merely employed in supplying the simple needs of the cultivators. Weaving is carried on in most villages, but the only articles produced are coarse cotton cloths, which are preferred to cheap European piece-goods on account of their durability. Blankets are made by the shepherd caste of Gareris, more especially in the jurisdiction of the Bhāonāthpur outpost, and coarse carpets (*darīs*) are woven in Chainpur, Daltonganj and Shāhpur. Silver and lac ornaments of a rude description are made for the simple finery of the women; brass utensils for domestic use are turned out by the village braziers; pack-bullock bags are made by Mallāhs, leather jars (*kūpa*) for holding *ghī* by Dabgars, and arrowroot by the aboriginals in the south.

TRADE. The principal exports are coal, hides, lac, *ghī*, oil-seeds, bamboos, cotton, tusser, cocoons and cutch or catechu; while the chief imports are European piece-goods, rice, salt, brass-ware, sugar, tobacco, kerosene oil, cotton twist, rice, and *rabi* seeds. The local supply of food-grains is, even in the best of years, insufficient to meet the demand, and rice is consequently imported every year in considerable quantities, chiefly from Rānchī and the Feudatory State of Sirguja. A part of the exports represents the surplus produce of that State, which is first imported into the district and then exported with the local produce. The chief trade centres are Daltonganj, Garhwā, Chainpur, Sonpurā, Majiāwān, Hariharganj, Husainābād, Pathrā, Chandwā, Nagar Untāri, Satbarwā, Pānki, Haidarnagar, and Shāhpur. The largest mart is Garhwā, which owes its importance to the fact that it is the principal emporium for the trade of the Sirguja State.

Generally speaking, the trade of the district is of a petty character. Barter is still the most common form of exchange and affords the middleman almost unlimited opportunities for profit. Not the smallest part of the profit made by the *Baniyā*, it is reported, is due to the skill with which he wheedles lac out of the rustic cultivator in exchange for sweetmeats or manages to arrange that payment for the hire of a bullock or the purchase of clothes or tobacco shall be affected by exchange for an exorbitant

amount of grain to be paid at the next harvest. The system of hiring bullocks is known as the *būha* system, the conditions being the loan of a bullock for the eight or nine months of the cultivating season in return for 7 maunds of grain. As the original price of the bullock is seldom more than Rs. 14, the cultivator pays practically its whole value in return for one season's work. It is against this evil that the system of agricultural loans introduced in the Government estate is mainly directed.

Merchandise is still almost entirely carried by pack-bullocks, the drivers of which are, indeed, the chief traders. These *bepāris* wander about, picking up supplies wherever they can find them, and taking them from one *hāt* or market to another, until they can get rid of their loads. The local traders are men with scarcely any larger sphere of operations, their practice being to buy paddy by the bullock-load from the *bepāris*, employ women of the village to husk it, and then retail their purchases in the form of rice. As a class, in fact, they are petty hucksters with a very small capital, whose dealings do not, as a rule, extend beyond the adjoining districts and states. This commercial backwardness seems doomed to disappear now that the railway has tapped Palāmau.

Fairs. A great deal of the trade of Palāmau is done at the fairs, held from time to time in different parts of the district, to which the neighbouring cultivators flock in order to provide themselves with cattle, clothes, brass vessels, etc. The most important of these fairs is that held annually at Daltonganj, to which traders from the neighbouring districts are attracted, and at which cotton piece-goods and brass-ware are the chief articles sold. The following is a list of the principal fairs.

Name of fair.	Police station or out-post.	Date on which held.
Mahuādānr ...	Mahuādānr P. S. ...	25th May to 15th June.
Nāwādih ...	Kerh O. P. ...	15th to 17th December.
Chaklā ...	Chandwā O. P. ...	23rd February to 2nd March.
Sarikdal ...	Manātu O. P. ...	7th to 23rd March.
Bālumāth ...	Bālumāth P. S. ...	15th to 25th November.
Hirhinj ...	Bālumāth P. S. ...	4th to 11th January.
Bālubhang ...	Bālumāth P. S. ...	18th March to 4th April.
Ketār ...	Bhāonāthpur O. P. ...	16th to 25th April.
Nagar Untāri ...	Untāri O. P. ...	8th to 25th March.
Daltonganj ...	Daltonganj P. S. ...	3rd February to 2nd March.

CHAPTER X.

MEANS OF COMMUNICATION.

DEVELOPMENT OF COMMUNICATIONS.

In 1880 a writer describing Palāmau prefaced a section on "Roads and Carriage" with the following remarks:—"This section might almost be written in the words, *mutatis mutandis*, of Aldrovandius famous chapter concerning the owls of Iceland. Of *pucka* bridged roads there is not a single example. The few roads that do exist are little better than mere fair-weather tracks. Of these the principal are from Daltonganj to Rānchī, and from the same place to Dehrī on the Son. But few of the others are practicable for carts, and the remainder can only be used by pack-cattle and elephants."* Even as late as 1897 the Deputy Commissioner reported that "Palāmau has neither railway nor reliable water communications, and all her roads are third class ones, *i.e.*, *kachhā* and unbridged ones. Her mode of transport of goods is by cart and by pack-bullocks. In the summer months (April, May and June), transport is very difficult owing to the want of fodder and water for cattle, and during the rains it is rendered almost impossible owing to the heavy condition of the roads and the flooded state of the numerous rivers and streams which intersect the roads frequently. Daltonganj is over 100 miles from Gayā, the nearest railway station; in dry weather it takes 8 to 10 days, and in the rainy season 12 to 20 days for a cart to do the journey." During this famine the difficulty of transport proved insurmountable, both road-routes and river-routes failing, and Palāmau was cut off from supplies. "The fact is," the same officer said, "that Palāmau is probably the most isolated district in the whole province of Bengal,—a district which in a time of scarcity may not inaptly be compared, in the words of the late Sir George Campbell, to a ship at sea running short of provisions."

This isolation has now become a thing of the past owing to the construction of the Bārun-Daltonganj Railway, which was opened as far as Rajharā in May 1902, and was extended to Daltonganj by the close of the year, thus giving Palāmau direct

* V. Ball, *Geology of the Aurangā and Hutar Coal Fields*, Memoirs of the Geological Survey of India, Vol. XV.

connection with the railway system of India. The interior, however, has not yet been opened out fully, owing partly to the nature of the country, which renders the expense of road making prohibitive, and partly because the resources of the District Board are inadequate for the large area comprised within the district. Only a small portion of the trade is carried by bullock carts; and in most parts pack-bullocks form the only means of transport. The deficiency of communications is especially marked in the south, a large roadless tract, mostly covered by hill, rock and jungle. Here the hilly and broken character of the country and the absence of roads render cart traffic impossible, and the entire trade is carried by slow-moving pack-bullocks along numerous well-worn tracks.

Roads. The first road made by Government was laid down in 1863, when the American War had interrupted the cotton trade, and it was desired to provide an outlet for the cotton grown in Palāmau and Sirguja. This road was designed to connect Daltonganj with the Grand Trunk Road at Sherghāti in the Gayā district, a distance of 70 miles, and was somewhat grandiloquently called the Bihār Cotton Road; but it never justified its title, as it remained for many years unfinished, terminating abruptly in the midst of dense jungle in the hilly passes on the borders of the district. The great extension of roads which has taken place since that year will be sufficiently apparent from the fact that the district now contains altogether 350 miles of roads, all maintained by the District Board, of which $3\frac{1}{2}$ miles are metalled with stone, and $44\frac{1}{2}$ miles with gravel, the latter having a fine surface for light traffic, while 302 miles are unmetalled. The District Board also maintains 10 miles of village roads. The following is a brief account of the principal roads.

Principal roads. The most important roads are those radiating from Daltonganj and Garhwā, the two great marts of Palāmau, which are themselves connected by a road 19 miles long. Below Daltonganj this road crosses the Koel, which is here 600 yards wide, and then strikes north-west to Garhwā, crossing 4 other unbridged streams.

Hariharganj road. From Daltonganj there are three main roads, two of which strike north into the Gayā district, while the third runs south t Rānchī. The first of these, proceeding from north to south, the Daltonganj-Hariharganj road with a length of $43\frac{1}{2}$ miles, whi connects the headquarters station with Aurangābād in the Gay district. This road, which was commenced in 1868 as a famin relief work, strikes through the district in a north-easterly directi to Hariharganj on the north-eastern border, passing the mark of Nāwā and Chattarpur. For the first 12 miles it is gravell

but the remainder is unmetalled. At the sixth mile it crosses the Amānat, the bed of which is over 200 yards wide; and besides this, there are 4 nullahs or streams also unbridged. This road was formerly the highway to Daltonganj, but has lost its importance since the construction of the railway.

Sherghāti road.

South of this road is the old Bihār Cotton Road begun in 1863, known locally as the Daltonganj-Sherghāti road, which leads to Eghārā on the eastern boundary with a continuation to Sherghāti. Altogether 38 miles of this road lie within Palāmau, of which 16 miles are gravelled, 13 are unmetalled but make a good fair weather road, and the remaining 9 miles are a jungle track, practicable, however, for carts. Owing to the railway it has lost the traffic to and from Gayā which once passed along it. It passes over 8 streams, including the Amānat, which it crosses at Tarhasi near the 16th mile, and the principal markets along it are Leslieganj, Padmā and Manātu. At Leslieganj a branch road runs due east to Pānki (20 miles), and thence connects by hill paths with Chatrā in the Hazāribāgh district.

Rānchi road.

The highway to the south is the Rānchī road, of which 65 miles lie in this district. It strikes due south-east from Daltonganj *viâ* Satbarwā, Mankā, Lātehār and Chandwā, crossing 33 unbridged streams before it reaches the border of the district. The first 10 miles are gravelled, but otherwise it is unmetalled. While other roads are losing their importance, this road is fast coming to the front as a railway feeder. At Chandwā it is crossed by another road, 22 miles long, much used by pack-bullocks laden with grain, which connects the marts of Chatrā in Hazāribāgh and Lohārdagā in Rānchī, and passes through Bālumāth.

Garhwā road.

Garhwā is the other chief road centre in the district, as it commands 3 different routes of trade, viz., the route to the Tributary State of Sirguja, the route to Mīrzāpur, and the route to Shāhābād *viâ* Akbarpur and to Gayā *viâ* Bārun on the Son. The road to the two districts last named, which is known as the Garhwā road, is 27 miles long. From Garhwā it runs in a northerly direction to Majiāwān (12 miles), where it crosses the Koel, the bed of which is here over half a mile broad, and then continues parallel to that river as far as Muhammadganj. From that place it turns off to the north-east running parallel to the Son, and after passing through Husaināhād, leaves the district 7 miles north of that market. Connected as it is with Daltonganj by the road first mentioned, it used to be the main route between Daltonganj and Bārun in the Gayā district, but is now being supplanted by the railway.

Sirguja road.

To the south is the Sirguja road, 32 miles long, passing through Rankā and Kudrum to the border of that State. At present, there is only a track beyond Rankā, but this is one of the most important roads in the district owing to the large volume of trade coming from Sirguja to Garhwā.

Other roads.

Another important road is that connecting Garhwā with Bisrāmpur ($10\frac{1}{2}$ miles) *viâ* Garhwā Road railway station, as it is the channel by which the bulk of the Sirguja and Mīrzāpur trade passes to the railway. It is gravelled and bridged throughout, except at the Koel. The Daltonganj-Garhwā road continues to Untāri (26 miles), and thence it is to be extended to the border of Mīrzāpur to connect with the large market of Dudhī. Another important feeder road now under construction is that from Chattarpur to Japlā railway station (18 miles), with a branch to Deorī Ghāt.

RAILWAYS.

The only railway in the district is the Bārun-Daltonganj branch of the East Indian Railway, opened in 1902, which connects Daltonganj with the Grand Chord line at Bārun (Son East Bank). Altogether 55 miles of this railway lie within the district, and there are 7 stations, viz., Japlā, Haidarnagar, Muhammadganj, Untāri Road, Garhwā Road, Rajharā and Daltonganj.

WATER COMMUNICATIONS.

The Son, forming the northern boundary of Palāmau, is navigable during the monsoon and for a short time after its close, but navigation is intermittent and of little commercial importance, owing to the violent floods in the rains and to the small depth of water which remains after their cessation. The Koel is also navigable for shallow flat-bottomed boats during the rains between Daltonganj and the Son, but is rendered dangerous by the sudden freshets which occur; at other times the small depth of water and outcrops of boulders make navigation difficult even for small boats. South of Daltonganj the rocky rapids preclude the use of boats. With these exceptions, there are no navigable rivers.

Ferries.

All the rivers are unbridged, but ferries are maintained along the Son, Koel and Amānat. The ferries along the Son are situated at Dangwār, Deorī, Rānīdewā, Sonripurā, Sonpurā, Hariharpur, Kadhwan, Budhuā, Partā, Khokhā and Gārā. On the Koel there are ferries at Shāhpur opposite Daltonganj and at Rehalā on the 4th mile of the Garhwā-Bisrāmpur road; and on the Amānat at Singrā on the 6th mile of the Daltonganj-Hariharganj road and at Tarhasi on the 16th mile of the Daltonganj-Eghārā road.

POSTAL COMMUNICATIONS.

There are altogether 22 post-offices situated at Bisrāmpur, Chattarpur, Gāru, Hariharganj, Kajru, Kerh, Lesliganj, Mahuādānr, Manātu, Nāwā Bhandariā, Nāwā Jaipur, Pānki,

Pātan, Chainpur, Rajharā, Rankā, Satbarwā, Garhwā, Japlā, Lātehār, Bālumāth and Chandwā. The value of the money-orders issued from these post-offices in 1905-06 was Rs 3,97,611 and of those paid Rs. 3,21,005; 2,160 accounts have been opened in the Savings Banks, the deposits amounting to Rs. 71,268. Prior to the famine of 1897, there was no telegraph office in this district, but the necessity of connecting Daltonganj with the outer world by telegraph was then realized, and a line was constructed. There are now 3 telegraph offices at Daltonganj, Garhwā and Japlā.

CHAPTER XI.

LAND REVENUE ADMINISTRATION.

PALAMAU PARGANA. THE district of Palāmau is divided into 4 *parganas* or fiscal divisions, viz., Palāmau, Belaunjā, Japlā and Torī, each of which has a separate revenue history and a separate system of land tenures. The Palāmau *pargana* comprises the territory formerly held by the Chero chiefs, a wild hilly region, which was conquered by the British in 1773. When the British had taken possession of the *pargana*, a settlement for 5 years was entered into by Mr. Camac, the Government Agent, with the Chero Rājā, Gopāl Rai, and two others, who undertook to pay a revenue of half a lakh within that period. The effect of this settlement was to reduce the Chero chief to the position of an ordinary zamīndār paying revenue to Government, for the *sanad* or *pattā* granted to the lessees contained no provision allowing them the exercise of judicial or police powers or the enjoyment of any advantages beyond those of ordinary zamīndārs. In 1786 another settlement was made with Sheo Parshād Singh, the regent of Churāman Rai, a minor, who had succeeded in 1784, the *sanad* granted on this occasion also being in no way different from an ordinary zamīndāri lease. This settlement was the work of Mr. Mathew Leslie, Collector of Rāmgarh, to which district the *pargana* was attached; and in 1789 he effected another settlement, in which he fixed the revenue payable by the Rājā to Government at Rs. 12,181, and also drew up a list of *jāgīrdārs* and other tenure-holders, an fixed the revenue due from them to the Rājā.

Shortly after this, Churāman Rai attained his majority a assumed the direct management of his estate; but he pro extravagant and incapable, and the revenue having fallen arrears, his estate was put up to public auction in 1814 bought in by Government for the amount due. Two years la Government bestowed it upon Ghanshām Singh, Rājā of D as a reward for services rendered; but owing to the oppressi committed by his servants in collecting the revenue, and t system of interference with the tenure-holders, the people br into revolt. Government consequently resumed the grant

1818, and has since then held the estate. From that year until 1839, the land revenue of the *pargana* was Rs. 25,234, of which Rs. 12,181 were assessed on the *khālsa* villages, *i.e.*, the villages under direct management, and Rs. 13,053 were payable by the *jāgīrdārs*. In 1839 another settlement was made for 20 years by Mr. Davidson, the Principal Assistant Agent to the Governor-General, and this was followed by various short settlements till 1864, when a regular ryotwāri settlement of the Government estate was commenced, which was completed by Mr. L. R. Forbes in 1872. The last settlement, carried out by Mr. D. H. E. Sunder between 1894 and 1896, has a term of 15 years, commencing from the beginning of the Faslī year (which is current in Palāmau) in September 1896.

The Government estate. Prior to the British conquest, the Chero rulers had created a number of *jāgīrs* and other tenures, resumable on failure of male heirs of the grantees, retaining the remainder of the *pargana* as their *khālsa* or personal property. When Government came into possession, the *jāgīrdārs* were allowed to retain their *jāgīrs*, the *khālsa* villages alone remaining in the direct possession of Government, and it is these which now form what is known as the Palāmau Government estate. This estate comprises 399 villages with an area of 425 square miles, of which 294 square miles are cultivated and 131 square miles are jungle and waste.

At the settlement concluded by Mr. Forbes in 1872, the total rental assessed was Rs. 40,843, the assessment being based on the *pariādāri* and *utakkar* systems described in Chapter VIII, and on a definite classification of rates. The lands were settled with the cultivators or ryots, but over them were placed *thīkādārs* or farmers, who were paid 10 to 15 per cent. commission on their collections of rent, supplemented in some cases by grants of *manjhihas* or *nij-jot* lands at nominal rates of rent. The usual evils inseparable from the *thīkādāri* system continued, for by the simple expedient of abolishing these rates and ignoring the distinction between the two systems above referred to, and then settling relinquished and new lands at higher rates, the *thīkādārs* forced up the settled rental from Rs. 40,842 to Rs. 57,693.

The result of the settlement of 1896 was to raise the rental from cultivated land to Rs. 74,432, the increase being chiefly due to the extension of cultivation ; and by the additional assessment of *mahuā* and lac-bearing trees, this was raised to Rs. 87,790. The rental is payable in 3 instalments or *kists*, viz., one quarter or 4 annas on the 28th October, one-half or 8 annas on the 28th January and one quarter or 4 annas on the 28th April, these instalments being paid respectively from the sale

proceeds of the *bhadoi* crops, of the winter rice and other *kharif* crops, and of the *rabi* crops. Rents for *mahuā* and lac-bearing trees are payable in one instalment on the 28th May.

The *thīkādāri* system was abolished in 1896, and the system of direct (*khās*) management introduced, the *manjhihas* or *nij-jot* lands held by the *thīkādārs* being resumed and assessed to rent at the ordinary rates Another important measure carried out after the completion of the settlement was the marking off of protected forests in the Government estate. By a notification of the 17th July 1894, all waste lands, the property of Government in the *khālsa* villages, with the exception of lands used by the villagers for cultivation or habitation, had been declared "Protected Forests." The village areas were marked off in blocks of a convenient shape, adding to the cultivated lands such quantity of waste land as would be sufficient for the needs of the villagers; and the blocks of waste land left over were, if of suitable size, constituted Protected Forests.

The tenants.

The tenants are, in common parlance, divided into three classes—*jeth raiyats*, *khuntkatti raiyats* and *āsāmis*. The *jeth raiyat* is the headman of the village; the term *khuntkatti raiyat* means a man who first cut the tree stumps (*khuntā*), *i e.*, cleared the forest and introduced cultivation, and is hence applied to tenants or the descendants of tenants who have reclaimed and held land in the village since its foundation; the *āsāmi* is the ordinary cultivator occupying a holding other than a rent-free holding.

Nearly all the rent-free holdings are service tenures, resumable by Government, and the majority are baigāi and *pūjāri* lands, *i.e.*, holdings given to the Baigā or Pūjāri in remuneration for his services in propitiating the village deities. They are purely service lands which the holder has no right to sell or mortgage and the same remark applies to the *chaukīdāri* and *goraiti* tenures held by the village *chaukīdār* or *gorait*. *Baigāi* lands, by custom descend from father to son, unless the villagers become dissatisfied with the Baigā, when they frequently replace him by a person who seems more suitable for the position. The only rent-free tenures not resumable by Government are called *khairāt*, *i.e.*, petty maintenance grants given by the former Chero Rājās to *fakīrs* or religious mendicants, Brāhmans and others. *Khairāt* tenures here, as in the *jāgīrdāri* villages, are heritable and transferable by sale, gift or otherwise, and, in fact, many of them are no longer in possession of the original grantees.

Administration.

The Government estate is administered by the Deputy Commissioner with the assistance of a Manager, called a Khās

Tahsildār, who is generally a Sub-Deputy Collector. It is divided into 4 circles (*tahsīls*). each of which is under the control of a *tahsīldār* or rent-collector assisted by a *peshkār* and a messenger or chainman. In each village there is a headman, called a Mahto or Gāowan, *i.e.*, the chief man of the village, who is the immediate respresentative of Government. His duties are to guard the village boundary marks and report their condition ; to regulate the use of irrigation reservoirs and to get them repaired, if necessary, with the help of the villagers ; to report any changes in the occupancy of land, any new cultivation of unsettled waste land, desertions of holdings, damage done to reservoirs or trees, and any other matter affecting the interests of Government. In return for these services, the Mahto is given a rent-free grant of rice land, the area so granted being one acre for every 100 acres, or part thereof, under cultivation in the village, subject to a maximum of 4 acres; if no such land is available or the Mahto refuses the offer of land in return for his services, he is allowed a yearly remission from the rent of his ryoti holding equal in amount to that which could be assessed, at the rate of Rs. 4 an acre, on the area of *mahtoī* land to which he would be entitled. A Mahto is liable to dismissal by the Deputy Commissioner for misconduct or neglect of duty, and may on dismissal be ejected from the land granted to him during his tenure of office. This land is not transferable, and is held by each successive holder of the office of Mahto ; it is accordingly known as *mahtoī* land.

Outside the Government estate there are a number of estates which were originally tenures known as *jāgīrs*, *ijāras* and *khorposhdārī* or maintenance grants. These tenures were created by the native rulers of Palāmau, who alienated a large part of the *pargana* by granting such tenures at quit rents, subject to a right of re-entry in default of male heirs. The majority date back to the time when the Chero chiefs were continually engaged in feuds and petty wars amongst themselves. The necessity of keeping a sufficient number of adherents in a constant state of readiness, to defend themselves against sudden attack, and also to make reprisals upon their neighbours, gave rise to the custom of bestowing lands in *jāgīr* or fief. These *jāgīrdārs* obtained *sanads* from the Rājās for the grant of lands under an engagement of vassalage, or, in other words, of being at all times ready to assist the Rājā with a certain proportion of armed followers, whom they maintained upon their *jāgīrs*. Besides these military grants, there were *khorposhdārī* grants made to relatives for their maintenance, grants for services of a civil or

Private estates.

political character, grants in lieu of official salaries, grants for charitable purposes, and the like.

The following is a statement of the various tenures. The *jāgīrs* included (1) service *jāgīrs* or grants made by the rulers of Palāmau for services rendered, whether civil, military or political; (2) *jāgīr kānungo* and *jāgīr kāzī* or grants made in virtue of the office of *kānungo* or *kāzī* and in lieu of an official salary; (3) *jāgīr bābuān*, grants made by the chiefs to their relatives, for whose maintenance the proceeds of the land were intended; (4) *jāgīr Cheroān* and *jāgīr Kharwār* or lands assigned in return for military services to members of the Chero and Kharwār tribes, the old fighting clans of Palāmau; (5) *jāgīr ināmi* or grants made in reward for services rendered during the rebellion of a Chero chief in 1802; (6) *jāgīr mutfarkā* or miscellaneous grants, the main provision of which was the payment of a fixed quit rent; and (7) modern *jāgīrs*, also called *jāgīr ināmi*, granted by the British Government in recognition of loyal services rendered during the Bhogtā rebellion and the Mutiny.

The *ijāra* tenures have been classified as (1) simple *ijāras* or ordinary leases, *i.e.*, tenures held under no definite terms or conditions except the payment of a fixed rent, some being leases for a specific term of years and others leases without limitation of time; (2) *ijāra bai-pattā* or lands purchased out-and-out by the occupants; (3) *ijāra khairāt* or charitable grants; (4) *ijāra jāgīr* and *ijāra ināmi* or grants given in reward for miscellaneous services; (5) *ijārā jamā brit* or grants made in consideration of an advance of money, subject to the payment of some nominal rent; and (6) *ijāra mukarari* or grants which have descended from father to son for many generations without any variation of the *jamā* or rent.

The *jāgīrdārs* were originally of superior standing and importance to the holders of *ijāras* and proved themselves a thorn in the side of the Rājā of Palāmau. Thus, in a petition presented in 1813 by Rājā Churāman Rai, praying that his estate might not be sold, he says "they (*i.e.* the *jāgīrdārs*) consider the portion of my estate held by them in *jāgīr* as their own patrimony; they adopt no measures for liquidating the arrears of revenue, and do not obey my orders." It is at least clear that as long as Churāman Rai held the *pargana*, these *jāgīrdārs* were masters of the situation. When, however, he fell into arrears with his rent, and it was determined to put the estate up to auction, the following proviso was published as one of the conditions of the sale:—"Whereas there are several tenants in the *pargana* Palāmau, commonly termed *jāgīrdārs*, who have for a long period

held their lands at a fixed and easy rent, it is hereby notified that the above-mentioned persons are to be continued in possession by the purchaser and his heirs or by whatever person the estate may be hereafter possessed in consequence of private or public sale, or any other kind of transfer, on their agreeing to such an equitable *jamā* as may be determined by the Assistant Collector at Rāmgarh; should the proprietor of the estate and the *jāgīrdārs* disagree as to the term of settlement, subject to an appeal to the Court of Justice." Government, having purchased the estate, succeeded to the rights and interests of the old rulers of Palāmau in respect of these tenures, and did not resume them, but proceeded to give effect to the conditions of the sale by assessing them to rent. No distinction was made between the different classes of *jāgīrs* and *ijāras*, and in practice they were recognized as both heritable and permanent.

In 1894 it was found that they had been freely transferred either in whole or in part by sale; in every case but one, male heirs of the original grantee were in existence, and while in the case of the larger fiefs the custom of primogeniture had been followed, in the smaller ones, which form the majority, the tenures had been freely divided amongst members of the family like any ordinary property. This being the state of affairs, it was decided in 1895 that (1) whatever might have been the origin of the various classes of *jāgīrs* and *ijāras*, there was no longer any necessity for maintaining any distinction between them, because in practice they had, for a long series of years, been virtually recognized as both heritable and permanent; (2) that the transferability of all such tenures should be recognized, the right of Government to resume on the failure of male heirs of the original grantees being abandoned once for all without any payment of compensation, and that all transferees should be admitted to registration; (3) that the tenures (both *jāgīrs* and *ijāras*) should thenceforth be raised to the position of revenue-paying estates, that the sale law should be applied to them, so as to facilitate the realization of Government revenue, and that the joint responsibility of all the holders of a tenure for the payment of the Government dues should be maintained. This may be regarded as the Permanent Settlement of Palāmau.

Revenue-paying tenures.

The next link in the chain of infeudation is formed by those rent-paying sub-tenures which are immediately subordinate to these estates and intervene between them and the peasant holdings. First in order come those tenures which, in name and nature, resemble those *jāgīrs* which have been raised from the status of tenures to that of estates. The *jāgīrdārs* of the *pargana*,

following the example set them by the Rājās, in their turn, gave portions of their estates in *jāgīr* on identical terms. Each *jāgīrdār* had to provide the younger branches of his family with maintenance, so that each large *jāgīrdāri* estate represents, as it were, a facsimile of the original estate or zamīndāri held by the Rājās of Palāmau. These sub-*jāgīrs* and other tenures of old date are nominally liable to resumption by the superior tenure-holder on failure of heirs male in the male line; it is only those estates created in later times, such as *mukarari* leases, mortgages, etc., granted for a consideration, which are not liable to resumption by the superior *jāgīrdars*. As in the case of the *jāgīrs*, the rents of the sub-tenures are merely nominal, and they are generally held on a quit rent.

Madad. The proprietors of Palāmau, in distributing their possessions among their immediate relations and followers, had less regard to the fixed revenue due from each estate than to the assistance, either in money or supplies, which each of these sub-proprietors was bound to give to his chief. Accordingly, the *sanads* stipulated for a mere trifle in the way of revenue, but the grantee was liable to furnish aid (*madad*) to his chief in case of need. This exaction of *madad* was not confined to the Rājās or ruling chiefs, but the grantees of estates, *jāgīrdārs* and others, in distributing their estates, also stipulated for *madad* in the *sanads* granted by themselves, and grantees of a lesser degree and farmers recouped themselves by similar demands upon the cultivators. At present, *madad* mostly takes the form of assistance rendered at births, deaths and marriages, and of yearly contributions at the time of the Dasaharā.

Leases. After these tenure-holders come the several classes of lease-holders, holding permanent and temporary leases, which in themselves require no special explanation. There is a peculiar form of lease bearing no special name, though it might with propriety be called a *jangalburi* lease. It consists in the separation from the rest of the village area of a certain tract of jungle land, and provides that the lessee shall clear the jungle and bring the land under cultivation. Sometimes the leases provide for a quit-rent, and give the land to the lessee and his heirs to hold as long as the rent is regularly paid; in others, the lease is temporary and not hereditary; while in others, again, there is a clause providing for right of enhancement. Many of these lease-holders have been in possession for several generations, and no longer consider their tenures as a portion of the parent village.

Rent-free tenures. The rent-free tenures of Palāmau may be broadly divided into two classes—those created by the ruling chiefs, and those

created by the *jāgīrdārs* and other superior tenure-holders within their estates. They include a large number of religious grants given for charitable purposes or the maintenance of Brāhmans, *fakīrs* and others, simple rent-free tenures, grants made in reward of service, and other somewhat quaint grants, such as grants made to commemorate recovery from leprosy (*kusht sānt nimārtik*), and grants of villages and land given as compensation to the relatives of those killed in the service of their masters and hence called *khun bahā*, *i.e.* 'blood price.'

Many of these tenures contain revenue or rent-free estates of considerable extent. The latter, which are known as *Minhai Mahāls*, consist generally of a single village, though some contain more than one hamlet. They are heritable and transferable, and have in fact been inherited, subdivided and sold to as full an extent as the *jāgīrs* and *ijāras*. The most important is the estate known as the Nagar Untāri Mahāl, consisting of 301 villages. This estate seems to be as ancient as the original Palāmau estate, and to have been separate and distinct from it. The proprietors, who hold the title of Bhaiyā, do not appear to have been originally vassals of the Chero Rājās, the estate having been constituted an imperial grant, even prior to the creation of *parganas* Japlā and Belaunjā into an *altamghā* grant, and given to the Bhaiyās as a *ghātwāli* tenure for the protection of the Bihār boundary. The *sanad* of the Untāri estate provides for the maintenance of the police; and up to the present date the cost of the police force within the estate is met from its revenues, the Bhaiyā paying a fixed sum annually for the purpose.

Transferability of tenures.

Outside the Government estate, grants and tenures, such as *khorposh*, *jāgīr* and other subordinate tenures, other than ordinary *chākrān* lands, are by custom heritable and also transferable, so long as a male heir in the male line of the original grantee exists. On failure of male heirs, the tenure is resumable, without encumbrances, no matter who the transferee, who has obtained the tenure for consideration, may be. The claim that such tenures are only transferable with the consent of the grantor has been rejected by the Courts; and the small *nazr* or *salāmi* customarily rendered by tenure-holders cannot be regarded as rent.

BELAUNJA PARGANA.

Belaunjā, which is divided into four minor fiscal divisions or *tappās*, viz., *tappās* Paranrā, Pahāri, Demā, and Khairā, forms an estate belonging to the Rājās of Sonpurā, an ancient Rājput family, which held *parganas* Japlā and Belaunjā on the east bank of the Son, and also some land in Shāhābād on the west bank of the river, in the early part of the 18th century. The Mugha Government styled the Rājās the sole zamīndārs of this tract,

which appears to have comprised a revenue-paying estate assessed to Rs. 2,459. For some act of disloyalty, as it would seem, the old Hindu Rājā was dispossessed, and the two *parganas* of Belaunjā and Japlā were confiscated and created into an *altamghā* estate by the Mughal Emperor Muhammad Shāh, in favour of the ancestor of the Nawābi family of the latter *pargana*. The Rājās fought every inch of the ground to keep their patrimony, and eventually the British Government intervened to put a stop to the constant quarrels and fights, and made a permanent settlement of the Belaunjā *pargana* with the then Rājā in 1816.

The principal subordinate tenures in Belaunjā consist of maintenance *jāgīrs*, service grants, *mukarari*, *istimrāri* and other hereditary tenures, both rent-paying and rent-free, similar to those found in Palāmau. There is, however, this to distinguish them, that the majority of the *mukarari* tenures were created by the intervention of the British Government. The Rājās, unable to pay their revenue, asked that, in recognition of their loyalty, special steps might be taken to save their property; and the measure adopted was to settle on *mukarari* leases a sufficient number of villages to pay the revenue, the lessees agreeing to pay their rent regularly to Government, which collected it direct from them. This system of realizing the revenue was given up in 1866. The peasantry of the *pargana* hold their lands, as a rule, on the *bhāoli* system described in Chapter VIII, both the *dānābandi* and *batāi* modes of paying rent in kind being in vogue.

JAPLA PARGANA. *Pargana* Japlā formerly belonged, as mentioned above, with *pargana* Belaunjā, to the Rājās of Sonpurā, but was granted by Muhammad Shāh as an imperial *altamghā* grant to Amat-ul-zohra Begam, wife of Nawāb Hidayat Alī Khān, and mother of Ghulām Husain Khān, the author of the Sair-ul-Mutākharin. The Rājās did not submit quietly to this summary ejectment, and it was only after a long and protracted struggle that the Nawābs succeeded in securing possession of Japlā, their possession being eventually confirmed by the British Government. The Nawābi family has now lost almost the whole of it, and more than three-fourths is held by aliens. As Japlā formed a Muhammadan estate, there are no extensive Hindu rent-free tenures, though there are many petty rent-free holdings granted by Rājput landlords. The chief rent-free tenures are those granted by the Nawābs, such as *mussajia* for the guardianship of mosques; *mukābir* or the guardianship of ceremonies; *wakf* or charitable bequests; and *niyāz-i-dargāh* or grants to particular

shrines. As in the adjoining *pargana* of Belaunjā, the ryots for the most part hold their land on the *bhāoli* system. The *pargana* having been originally given as an *altamghā* grant, no revenue is paid.

The Torī *pargana*, which extends over 664 square miles in the south-east of the district and is conterminous with the Bālumāth thāna, was originally part of the estate of the Mahārājā of Chotā Nāgpur, and was given as a maintenance grant to his half-brother in comparatively recent times. The tenures in this *pargana* are very different from those of the rest of the district, and here the *manjhihas* and *rājhas* tenures of the Chotā Nāgpur plateau are found. The origin of these tenures is traced to the formation of a village as it is still to be seen in this *pargana*. First comes the Bhogtā who clears jungle here and there for his *jhūm* or shifting cultivation, and then deserts it to clear more virgin land, whence he can with less trouble get a larger produce. When a few acres have been cleared in this way, the solitary Ahīr or herdsman appears on the scene with his herd of buffaloes, and builds huts in the clearing, the soil of which is gradually enriched by the manure from his cattle. When the land yields more than enough for his requirements and becomes rich enough to grow maize, one or two settlers come and build their huts by the side of his; then generally some substantial cultivator, finding the land he has in his own village not equal to his necessities, and looking about for a new home, thinks this a likely spot, and offers the landlord a small rent for the right to make what he can of the place, and sets to work preparing low rice land. Some he keeps for himself, the rest he gives on rent to new-comers, whom he thereby induces to settle; they prepare more land, and so the village is founded. Sooner or later the landlord discovers that the village can afford to pay a higher rent, and sends for the founder, finds out from him the amount of land in cultivation, allows him so much rent-free, and fixes rent on the remainder. This is, of course, a modern version of the rise of a village, but the process must have been somewhat similar in all times. *Manjhihas*, a term literally signifying the land in the middle (*majhi*) of the village, is the rent-receiver's old private land, which he often seized from the original settlers; *rājhas* is the land let by him, on which he got rent from cultivators; and *bhuinhāri* is the land of the original founder, for which he got either no rent or a little rent and some predial service.

TORI PARGANA.

The system of tenures generally prevailing is as follows:— The *don* or low rice land of the village is divided into shares called *pattīs*, each of which is supposed to contain three *bīghas*,

though the actual area varies considerably. With the *patti* is incorporated a certain quantity of *bāri* or homestead land, including the house of the cultivator, and some *mahuā* trees—the whole forming what is known as the *jīban*, on which rent is paid; with the *don* often goes *lagan* or complementary *tānr* land of a definite or indefinite amount. In general, where the portion of *don* land is fully three *bīghas*, one *bīgha* of *bāri* land is included; if less than this, one *bīgha* or *bāri*, and one of *bhitā* or high land go to make up the *patti*. Occasionally, in a backward village, the *patti* contains no *don*, but is made up entirely of *bāri* lands. In some villages the *bāri* has been regularly measured and apportioned to the ryots; in others a piece of land is pointed out to the ryots as a *bīgha*; and in some cases, any man holding more *bāri* than the quantity belonging to his *jīban* has to pay rent called *utakkar* for the excess area. No rent is chargeable for outlying *tānr* land, called *bāhir chaur*, or land outside the cow path, which does not get manured, nor for new cultivation in the jungle by villagers; but outsiders are charged rent for *dāhā* or *jhūm* lands, where the jungle-burning system of tillage is resorted to. This rent is also called *utakkar*, a term which is locally applied to all rents which are not *jīban*. In addition to the money rent, there are a number of *negs* or cesses levied on each house, so that the rate falls heavily on a man holding a small amount of land; in some cases however *neg* is levied on the amount of land held.

RELATIONS OF LANDLORDS AND TENANTS.

On the whole, relations between landlords and tenants are satisfactory, and even when strained, do not result in open rupture. This state of affairs is largely due to the fact that the district is sparsely populated and the competition for tenants is exceedingly keen. If cultivators are oppressed or rack-rented, they simply move on to one of the numerous zamīndārs who have need of them. In brief, the ryots are protected from oppression by the fact that at present there is a competition for tenants rather than for land, and have thus, by custom, security of tenure. In the north, however, the intricacies of the *bhāoli* system naturally leave much room for friction.

Predial services.

To the south there is dissatisfaction in some cases with the predial services and *bēgār* or unpaid labour, which the villagers are bound to give by customary obligation, receiving in return a daily subsistence allowance of 3 seers each of some coarse grain. Under this system the landlord is entitled to 3 days' labour in the year from each of his ryots, one day's labour being supplied at each of the harvests of the year, *kharif*, *rabi* and *bhadoi*. The ryots are also bound by ancient custom to give *harai*, *i.e.*, each villager

possessing ploughs has to supply one to plough the landlord's *khālsa* or private lands for one day at each harvest, and *ropni*, *i.e.*, at the time of transplantation to transplant seedlings for the latter. The village artizans are similarly bound to work for the landlord when needed; and when a marriage takes place in his family or he goes on a journey, the villagers have to give their labour free. This system has often led to considerable evils, caused not so much by the system itself as by its abuse. Thus, instead of 3 days in the year, the ryots are sometimes forced to work for the landlord a week or longer; sometimes they are taken from their homes, and compelled to accompany a marriage procession or carry baggage to distant places, without any remuneration except their daily food. An unscrupulous zamīndār, again, instead of confining his demands to one plough for one day, may press into his service as many ploughs as a ryot owns for two or three days together; or at the time of transplantation or harvesting he may force the villagers to work, not for one day, but until the transplantation or harvesting of his own crops is complete, before allowing them to turn to their own fields. All these are critical periods in the agricultural year, when the neglect of their own fields may entail great loss to the ryots. The discontent which may be caused by such abuse of the system is obvious.

Effects of the feudal system.

It must not be imagined that this state of affairs is at all general. The landlords, as a body, live on their ancestral estates and are much more in sympathy with their tenants than landlords in more advanced parts of the country. Some of the best features of the old feudal system are still preserved; and it is most refreshing to see the amity and good will that exist between the members of one of the leading families and their people. When they go into their villages, they are often accompanied by 500 or 600 of their tenants, who gladly turn out to carry their baggage or to beat for game, the only remuneration they get being their daily meals; should the beat be successful, the owner of 300 villages may be seen personally supervising the cutting up of game for the beaters. It must be remembered, moreover, that though a tenant is bound to render so many days work in the year in return for his daily food, he gets a *quid pro quo* in being allowed a valuable plot of homestead land rent-free. Although it is liable to abuse, the system, if fairly carried out, is an ideal one in Palāmau; but already signs of change can be seen, and it seems doomed to disappear.

The effect of the feudal system may also be seen in the attitude of the landlords towards Government. Government succeeded to the rights of the Mahārājās of Palāmau in the

greater portion of the district, and here the landlords are alive to the fact that till recently they held their estates in *jāgīr* and were its vassals The memory of the services they and their ancestors have rendered, when called on by Government to quell disturbances, is still fresh in their minds, and even as late as 1877 they supplied an armed force to put down a Korwā rising in Sirguja. On all sides they show a keen pleasure in meeting Government officials, in showing them the most courtly hospitality and in combining with them in schemes for the welfare of the people. When occasion has arisen in recent years for the Deputy Commissioner to visit Sirguja to break up troublesome bands of Korwā dacoits, the leading zamīndārs have insisted on accompanying him, with such retainers as they can muster, and forming a bodyguard to protect him from all possible danger; when he tours through the property of one of the larger land-holders, the latter welcomes him at the boundary of his estate with a picturesque following of retainers and servants, with his elephants and horses in the background, and the falconers in the foreground. Their public-spirited conduct during recent famines has earned high praise from Government, and though poor in comparison with landlords in other districts, the leading zamīndārs show the greatest readiness to place their purses at the disposal of Government and to assist in its schemes for the improvement of the district. Government has, however, now abandoned the position of feudal superior, by granting their *jāgīrs* to them as permanently settled estates; and the difficulty of keeping up such cordial relations must necessarily increase as the state of affairs in which they originated loses its freshness in the memory of the people.

ENCUMBERED ESTATES.

In concluding this sketch of land revenue administration, reference may be made to the working of the Chotā Nāgpur Encumbered Estates Act. It had been found that a number of large hereditary land-owners in Chotā Nāgpur had fallen into a serious state of indebtedness, with the immediate danger of their being sold up, and of their estates passing into the hands of usurers. The measure decided upon to meet this danger was no innovation, for such cases had hitherto been met by executive action on the part of the local authorities, on practically the same lines as those proposed in the Bill. When one of these zamīndārs was approaching a state of bankruptcy, the District Officer used to take over his affairs, including the management of his estate. A schedule was prepared of his debts, their gradual liquidation arranged for, an appropriate allowance for the maintenance of himself and his family being meanwhile provided from the estate's assets. But with the advance of time, it had become

necessary that this simple and effective procedure should be legalized, and this was done by the present Act (VI of 1876) being passed. This measure has been instrumental in preserving the extensive and cherished rights and peculiar tenures of the simple aboriginal and semi-aboriginal tribes of Chotā Nāgpur from the foreign adventurers or local Baniyās who would otherwise have bought up the estates; and protection has been afforded not only to the landlord but also to the tenant. The Act has been the salvation of many of the old families of Palāmau, and at present the estates managed by the Deputy Commissioner under its provisions extend over 1,631 square miles or one-third of the entire area of the district.

CHAPTER XII.

GENERAL ADMINISTRATION.

ADMINISTRATIVE STAFF. PALAMAU is a non-regulation district, *i.e.*, some of the general Regulations and Acts in force in other parts of Bengal have not been extended to it. The subdivisional system has not been introduced, and the whole district is under the direct control of the Deputy Commissioner, who has a staff consisting of 2 Deputy Collectors and one Sub-Deputy Collector. In the administration of the encumbered estates, which at present extend over 1,631 square miles, he is assisted by 2 Managers, and in the supervision of the Government estate, which has an area of 425 square miles, by a Manager, known officially as Khās Tahsīldār, who is generally a Sub-Deputy Collector; for the management of the protected forests, with an area of 71 square miles, there is a subordinate establishment of 4 foresters and 30 forest guards. The reserved forests are under the control of an Extra Assistant Conservator of Forests; and the other local officers are a District Superintendent of Police, Civil Surgeon and District Engineer.

REVENUE. The revenue of the district under the main heads increased from Rs. 2,75,000 in 1892-93, when the district was first constituted, to Rs. 3,11,000 in 1901-02. In 1905-06 the collections amounted to Rs. 4,84,000, of which Rs. 2,18,000 were derived from excise, Rs. 1,36,000 from land revenue, Rs. 70,000 from cesses, Rs. 49,000 from stamps, and Rs. 11,000 from income-tax.

Excise. Excise is the most important source of revenue. The receipts from this source fell from Rs. 1,35,000 in 1892-93 to Rs. 1,22,000 in 1901-02, as a result of the scarcity in the preceding year, but rose again to Rs. 2,18,000 in 1905-06. No less than Rs. 1,95,000 or nearly nine-tenths of the total income were obtained from the manufacture and sale of country spirit, *i.e.*, spirit prepared by distillation from molasses (*gur*) and the flower of the *mahuā* tree. The outstill system is in force; and there is one shop to every 43½ square miles and to every 5,483 persons. Nowhere in Chotā Nāgpur is this spirit drunk more freely, the average consumption being 272 proof gallons per 1,000 of the population and the expenditure 5 annas per head. This addiction to drink is described as the curse of the district.

Next to country spirit, the largest portion of the excise receipts is obtained from the duty and license-fees on *gānja*, *i.e.*, the dried flowering tops of the cultivated hemp plant and the resinous exudation on them; this drug is sold at 21 shops. The income from *gānja* in 1905-06 was Rs. 14,500, and that from hemp drugs of all kinds Rs. 17,000, representing an expenditure of Rs. 268 per 10,000 of the population. Opium is not in much demand, the duty and license-fees on the drug realizing only Rs. 5,000 or Rs. 84 per 10,000; and there are only 8 retail shops or one for every 77,450 persons.

Land revenue. The collections of land revenue rose from Rs. 63,000 in 1892-93 to Rs. 89,000 in 1901-02 and to Rs. 1,36,000 in 1905-06. In the year last mentioned the current demand was Rs. 1,09,000, of which Rs. 80,000 were due from the estates owned by Government, Rs. 27,000 from 255 permanently-settled estates, and Rs. 2,000 from 4 temporarily-settled estates. The incidence of land revenue is only 4¾ annas per cultivated acre. A substantial increase in the revenue can only be expected from the Government estate, which is not yet fully developed.

Cesses. In Palāmau, as in other Bengal districts, roads and public works cesses are levied at the maximum rate of one anna in the rupee. The collections in 1905-06 were Rs. 70,000, the current demand being Rs. 64,000, of which Rs. 42,000 were due from 764 revenue-paying estates, Rs. 21,000 from 434 revenue-free estates, and the remainder from 409 rent-free lands. There are 3,655 tenures assessed to cesses, with 5,523 shareholders, while the number of recorded shareholders of estates is 3,500. A revaluation of the district was completed in May 1907 with the result that the assessment has been increased from Rs. 64,000 to Rs. 92,000.

Stamps. The revenue from stamps rose from Rs. 26,000 in 1892-93 to Rs. 41,000 in 1901-02, and amounted to Rs. 49,000 in 1905-06. Of this sum Rs. 35,500 were obtained from the sale of judicial stamps and Rs. 13,500 from the sale of non-judicial stamps. Among the former court-fee stamps, and among the latter impressed stamps accounted for nearly the whole of the receipts.

Income-tax. The collections of income-tax were Rs. 10,000 in 1892-93 and increased in 1901-02 to Rs. 15,000 paid by 837 assessees. At that time the minimum income assessable was Rs. 500, but this was raised in 1903 to Rs. 1,000 per annum, with the result that the number of assessees fell to 211 and the receipts to Rs. 9,000. Since then the growth of trade caused by the railway has resulted in an increase in the collections, which in 1905-06 amounted to Rs. 11,000 paid by 243 assessees. The sum

realized is very small, as the district contains very few large traders or rich merchants; and the fact that there are only 243 persons liable to the tax is a striking proof of its economic backwardness.

Registration.

There are 3 offices for the registration of assurances under Act III of 1877, viz., Daltonganj, Husainābād and Lātehār. At Daltonganj there is a District Sub-Registrar, who deals, as usual, with the documents presented there, and assists the Deputy Commissioner in supervising the proceedings of the Sub-Registrars at the outlying offices. The marginal table gives the salient statistics of each office for 1906.

OFFICE.	Number of documents registered.	Receipts.	Expenditure.
		Rs.	Rs.
Daltonganj ...	1,114	2,826	1,933
Husainābād ...	468	1,203	1,072
Lātehār ...	310	307	1,050
TOTAL ...	1,992	4,336	4,055

ADMINISTRATION OF JUSTICE.

Criminal Justice.

Criminal justice is administered by the Deputy Commissioner, who has special powers under section 34 of the Criminal Procedure Code, by the sanctioned staff of one Deputy Magistrate with 1st class powers and one Deputy Magistrate with 2nd or 3rd class powers, and by the Sub-Deputy Magistrate who is usually posted to Daltonganj. In addition to these stipendiary Magistrates, there is an Honorary Magistrate at Chainpur, who holds his court at Daltonganj during the hot and cold weather.

Crime.

Criminal work is, on the whole, light, but it is reported that, owing to the scattered population and the great distances of villages from the police stations, a number of offences are never reported. Such offences are generally, however, petty, and of no particular moment to the person aggrieved; and when their cumulative effect is felt, the villagers put in petitions to have the offenders bound down, so that the neighbourhood is periodically purged of its bad characters. Although most of the crime is of a petty character, the peculiar circumstances of the district render it easy for gangs of thieves to be established; and owing to the fear inspired by the threats of professional criminals and bad characters, the people will sometimes suffer a good deal before daring to give information to the police.

The crimes most characteristic of Palāmau are cattle-poisoning and petty dacoities. There is a large export trade in hides, and the practice is for the dealers and their agents to advance money to destitute Chamārs and Bhuiyās, who have no means of repaying them except by surreptitiously poisoning cattle and so getting

their hides. The dacoities are the work of Korwās, a semi-savage tribe of the neighbouring State of Sirguja. When pressed by hunger, they make a raid across the border, armed with bows, spears and the inevitable axe (*baluā*), weapons which they are not slow to use if brought to bay. They are regularly accompanied in these expeditions by their women, who, as often as not, serve merely as beasts of burden in carrying back the spoil, though they too are armed with *baluās* and prove formidable antagonists, if forced to defend themselves. One noticeable feature of these dacoities is that if arrested, the Korwās almost invariably confess and do not retract their confessions; lying, it is said, is an unknown art among them.

Civil Justice.

The Deputy Commissioner is *ex-officio* Subordinate Judge of the district; and there is a Munsif at Daltonganj with the powers of a Small Cause Court Judge up to Rs. 100. A Special Subordinate Judge, stationed at Rānchī, used to dispose of suits instituted in Palāmau; but this arrangement was found to cause considerable inconvenience. The Munsif at Daltonganj was, accordingly, empowered, in 1904, to try original suits up to the value of Rs. 2,000 under the ordinary procedure; and since 1906 the Subordinate Judge of Rānchī, Hazāribāgh and Palāmau has been holding his court at Daltonganj once or twice a year as necessity arises. The Munsif also exercises the powers of a Deputy Collector in dealing with rent suits under the Chotā Nāgpur Tenancy Act.

Police.

For police purposes the district is divided into 9 thānas or circles with 11 outposts, as shown in the margin; the latter, it may be explained, are treated as thānas for police purposes, but not for other administrative purposes, such as the census. The regular police force consisted in 1905 of a District Superintendent of Police, 4 Inspectors, 22 Sub-Inspectors, 29 Head Constables and 218 constables, representing one policeman to every 17·9 square miles and to every 2,261 persons. The village police force, intended for watch and ward duties in the villages, consists of 1,249 *chaukīdārs*, viz., 1,058 under Act V of 1887, 145 under Regulation XX of 1817, and 46 *chākrān chaukīdārs*. There are also 64 *ghātwāls*, whose duty is to patrol the *ghāts* or passes

Thāna.	Area in square miles.	Outposts.
Bālumāth ...	666	Chandwā.
Chattarpur ...	338	Hariharganj.
Daltonganj ...	566	Lesliganj. Pānki.
Garhwā ...	567	Untāri.
Husainābād ...	683	Bhāonāthpur.
Lātehār ...	477	Kerh.
Mahuādānr ...	500	Gāru.
Pātan ...	506	Manātu. Bisrāmpur.
Rankā ...	611	Bhandariā.

over the hills, where there is any considerable volume of traffic; there are 33 such *ghâts*, the isolation of which renders it easy for criminals to waylay and rob travellers.

JAILS.

There is only one jail, the district jail at Daltonganj, which has accommodation for 127 prisoners. It contains barracks with separate sleeping accommodation for 79 male convicts and for 24 under-trial prisoners, and barracks without separate sleeping accommodation for 7 female convicts; there are 3 separate cells, and the hospital can hold 14 patients. Once very unhealthy, the jail is now exceptionally healthy, the mortality being only 12.4 per mille in 1905, while there were no deaths in 1906. This change is said to be due to the substitution for a rice diet, to which the people were unaccustomed, of a diet largely composed of maize, their staple food. The convicts are employed in stone-breaking, aloe-pounding, oil-pressing, brick pounding and bamboo work.

CHAPTER XIII.

LOCAL SELF-GOVERNMENT.

THE DISTRICT BOARD.

THE District Board was established in the year 1900, when the provisions of the Local Self-Government Act, III (B.C.) of 1885, were extended to the district. The members of the Board are all appointed by Government or are *ex-officio* members, the district not being sufficiently advanced to justify the introduction of the elective system. There are 11 members, of whom five are *ex-officio* members and six are appointed by Government. Government servants in 1905-06 represented 45·4 per cent., landholders 36·4 per cent., and pleaders and *mukhtārs* 18·2 per cent. of the total number.

In the first five years of its existence, *i.e.* in the quinquennium ending in 1904-05, the average annual income of the Board was Rs. 90,000 and the expenditure averaged Rs. 89,000 per annum, the largest disbursements being on account of civil works, which accounted for an average expenditure of Rs. 44,600 per annum. In 1905-06 the District Board had an opening balance of Rs. 14,400, and its total income from all other sources was Rs. 93,000, of which Rs. 35,600 were obtained from Provincial rates and Rs. 22,500 represented special grants made by Government for civil works, such as the construction of roads. Here, as elsewhere, Provincial rates form the principal source of income, but the incidence of taxation, though heavier than in other districts of the Chotā Nāgpur Division, was only 11 pies per head of the population in that year. Considering the large area of the district and the enormous amount of land unsuited for cultivation, there can be little doubt that the resources of the District Board are much below its needs; but with the marked extension of irrigation which has taken place of recent years, there has been a considerable increase in the value of land, and there is reason to hope that this deficiency will, to a certain extent, be made good. In the meantime, the District Board is largely dependent on the assistance afforded by Government to enable it to carry on its work, and a considerable portion of the expenditure is met by Government grants.

The expenditure in 1905-06 was Rs. 78,000, of which Rs. 41,000 were spent on civil works, particularly the extension

and maintenance of roads. Altogether, 360 miles of road are maintained by the Board, of which 3½ miles are metalled and 44½ miles are gravelled; ungravelled and unmetalled roads have a length of 302 miles; and the village roads maintained by it are 10 miles long. After civil works, education constitutes the heaviest charge on the resources of the Board, entailing in 1905-06 an expenditure of Rs. 20,000 or more than a quarter of the total disbursements. It maintains 4 Middle schools and aids the same number, besides giving grants-in-aid to 25 Upper Primary schools, 258 Lower Primary schools and 3 other schools. For the relief of sickness it keeps up 3 dispensaries and aids one other; in 1905-06 altogether 5·3 per cent. of its ordinary income was expended on medical relief and sanitation.

MUNICIPALITIES. Daltonganj is the only municipality in the district. It was constituted a municipality in 1888 and has a Municipal Board consisting of 10 Commissioners, of whom 5 are *ex-officio* members and 5 are appointed by Government. The area within municipal limits is 2¾ square miles, and the number of rate-payers in 1905-06 was 1,160, representing 24·9 per cent. of the population, the highest percentage in Chotā Nāgpur. The average annual income during the decade ending in 1901-02 was Rs. 5,700, and the expenditure was Rs. 4,900. In 1905-06 the municipality had an opening balance of Rs. 2,500, and the income from other sources was Rs. 15,000. The main source of income is a personal tax, realized at the rate of ¾ per cent. on the annual income of the assessees; Government buildings are assessed at 6 per cent. of their annual value; and other taxes are a latrine tax, a water-rate, a tax on professions and trades, a tax on animals and vehicles, and tolls on roads and ferries. The total incidence of taxation is higher than in any other municipality in Chotā Nāgpur, amounting to Re. 1-11-8 per head of the population. The expenditure in the same year, excluding the sums expended on deposits and advances, was Rs. 12,300, of which 29·87 per cent. was expended on conservancy and 15·36 per cent. on water-supply. Daltonganj is the only municipality in Chotā Nāgpur which has been furnished with a good pipe water-supply. The water is obtained from the Railway Company's pumping station, the source of supply being the Koel river, and is given by the Railway Company at the rate of 2 annas per 1,000 gallons. The cost of maintaining the water-works is covered by the levy of a water-rate at 5½ per cent. on the annual value of holdings. A further account of the town will be found in the article on Daltonganj in Chapter XV.

CHAPTER XIV.

EDUCATION.

PROGRESS OF EDUCATION.

PALAMAU is the most backward of all the districts of the Chotā Nāgpur Division in respect of education. A large part of it consists of hill and jungle; the villages are scattered and lie at great distances from one another; the people are largely of aboriginal descent, poor, ignorant and indifferent to the efforts made to educate their children. In these circumstances, it is no easy matter to diffuse education, but notwithstanding these difficulties great progress has been made since 1892, when the district was first constituted. In that year there were only 200 schools with 4,317 pupils, the proportion of scholars to the population of school-going age being 9·2 per cent. in the case of males, and 0·5 per cent. in the case of females. Ten years later, in 1901-02, the number of schools had risen to 290 and the number of pupils to 7,530; and 15·3 per cent of the boys and 1·8 per cent of the girls of school-going age were receiving instruction. In spite, however, of this advance, the census of 1901 showed that only 11,851 persons, representing 1·9 per cent. of the population (3·7 males and 0·1 females), could read and write any language, while the number of those able to read and write English was 540.

In 1905-06 the number of schools had risen to 325, while the aggregate of pupils was 7,802, the proportion of boys under instruction to those of school-going age being 15 per cent. Comparing these figures with those of 1892-93, it will be seen that the number of pupils has increased by 80 per cent. and the schools by 63 per cent. since the creation of the district. There is still, however, only one school for every 15 square miles, the average attendance at each being 24 pupils. Of the 325 schools now in existence, all but 7, with an attendance of 96 pupils, are public institutions, and it is noticeable that since 1892 the number of the latter has fallen from 34 and the attendance from 265. The inspecting staff consists of a Deputy Inspector of Schools, 3 Sub-Inspectors of Schools, and 7 Inspecting Pandits.

SECONDARY EDUCATION.

There is no college in Palāmau and only one High school, the Zila school at Daltonganj, maintained by Government, which has 144 pupils on the rolls. Three Middle English schools, with a total of 221 pupils, have been opened at Garhwā, Rankā and

Bisrāmpur, which receive grants-in-aid from the District Board; and there are 5 Middle Vernacular schools, with 347 pupils, four of which, situated at Husainābād, Nagar Untāri, Hariharganj, and Leslieganj, are maintained by the District Board, while one, at Chainpur, is aided by it.

PRIMARY EDUCATION. Altogether 273 primary schools for boys have been opened, of which 26 are Upper Primary and 247 are Lower Primary schools, the aggregate number of scholars being 6,248. Of the total number, only 16 are unaided; one is maintained by Government, and one is aided by the Daltonganj Municipality; and all the remainder are aided by the District Board. Five night schools, attended by 95 students, have been established, four being what are known as continuation schools; they are attended by adult labourers, cultivators and shopkeepers. The Upper Primary schools are accommodated in buildings specially provided for them, but with one or two exceptions the Lower Primary schools have no school buildings and are generally held in the houses of the village headmen.

SPECIAL SCHOOLS. There are 3 training schools in the district, viz., a second grade training school at Daltonganj, a training school for female mistresses at Haidarnagar, and a subdivisional training school at the latter place for Gurus or Primary school teachers. The number of other special schools is small. There are only 5 Sanskrit *tols*, of which that at Hariharganj is said to be the most promising, and 4 Muhammadan *maktabs* teaching Arabic and Persian.

FEMALE EDUCATION. The education of women has not advanced beyond the primary stage. There are now altogether 32 girls' schools, viz., 1 zanāna school at Daltonganj, 2 model girls' schools at Chainpur and Garhwā, 1 Upper Primary school and 28 Lower Primary schools. These schools are attended by 608 girls, and there are also 265 girls studying in boys' schools, so that altogether 873 girls are under instruction; of these 777 are Hindus, and 94 are Muhammadans and others. A girls' school intended exclusively for Muhammadan girls has recently been started at Garhwā.

BOARDING HOUSES. There are, in all, 5 boarding houses, of which one is attached to the Daltonganj Training school, and three to the Middle English schools at Husainābād, Nagar Untāri and Hariharganj, while the fifth is an unaided boarding house, with 100 inmates, under the management of the Roman Catholic Mission at Mahuādānr.

EDUCATION OF DIFFERENT RACES. The number of Hindus receiving instruction at the various educational institutions is 6,701 (including 1,491 Brāhmans) or 84·9 per cent. of the total number of pupils; and that of Muhammadans 810 or 10·4 per cent. According to the census

of 1901, the Muhammadans account for 8·4 per cent. of the total population, so that this proportion is satisfactory. On the other hand, the number of children belonging to the aboriginal races who have been attracted to the schools is extremely small, for the aggregate is only 319 (including 102 Christians), representing 3·7 per cent. of the total number of pupils.

CHAPTER XV.

GAZETTEER.

Alīnagar.—A village situated in the extreme north-east of the district, 5 miles east of Husaināhād. The village contains a small fort, of which the following description is given in the Annual Report of the Archæological Survey, Bengal Circle, 1903-04:—"This fort is called by the villagers Rohillā Kilā, and its erection is ascribed to a certain Musafi Khān, whose real name, perhaps, was Muzaffar Khān, although I do not know which person of that title is meant. The fort certainly is of a late period, and very likely built by a Muhammadan. It stands on a small hill north-east of the village. Its shape is rectangular, with a square chamber in each corner. The walls inside measure 55 feet 8 inches by 45 feet 10 inches, and 65 feet 8 inches outside between the corner rooms. The latter measure 18 feet by 19 feet 3 inches outside. Inside are five arched niches in each wall, some of which are open. Stairs led to the roof, which was protected by loop-holed battlements. In the inner court is a square well, and another one is a little below on the eastern slope of the hill with a vaulted tunnel leading to it. The walls are made of stones, mixed with concrete and bricks. The building is in ruins, but does not call for any repairs, as it is of very little archæological or architectural interest."

Amhar Tappā.*—A *tappā*, subordinate to *tappā* Untāri, situated to the west of the district. The principal markets are Garhwā, Mirāl, Ramnā and Untāri.

Bāresānr Tappā.—A *tappā* situated in the south of the district, with an area of 7 square miles. It consists of a small valley, traversed by the Barwe river, and forming a complete basin surrounded by lofty forest-clad hills. There are only 7 villages in the *tappā*, of which the most important is Bāresānr, a Government village and formerly a police outpost, where there is a perennial spring, the water of which is said to be hot in winter and cool in summer. This *tappā* has lost much of its

* In Palāmau the word *tappā* is placed before the name, *e.g.*, Tappā Amhar. The order has been inverted in this chapter for facility of reference.

agricultural prosperity owing to the fact that the inhabitants are convinced that their tutelary gods would be offended if they were to erect *bāndhs* to irrigate their crops, the result being that the latter are liable to periodical failure.

Bāri Tappā.– One of the largest *tappās* of Palāmau, situated in the centre of the district; it contains much broken and hilly ground, particularly in the south and south-eastern portions, whence numerous streams flow into the Aurangā. That river runs through it from south-east to north-west, and the Rānchī road passes through its centre; there are also well-frequented tracks leading to *tappās* Mankerī and Simā in the south. In this *tappā* Government owns 77 villages, with an area of 68 square miles; the principal markets are Satbarwā, Koili, Nawādih, and Saraidih, and there is a police out-post at Kerh.

Belaunjā Pargana.—The Belaunjā *pargana* forms a long stretch of hilly broken country, varying from 10 to 12 miles in width, intervening between the Palāmau *pargana* and the Son river, which runs due east and west along the whole of the northern boundary. The district of Mirzāpur in the United Provinces forms the extreme western, and the North Koel river the greater part of the eastern, boundary. A small portion of the *pargana*, stretching across the Koel river, intervenes between the *pargana* of Palāmau to the south and that of Japlā to the north. The *pargana*, which belonged to the Gayā district until 1871, is divided into 4 *tappās* or minor fiscal divisions known as Paranrā, Pahāri, Demā and Khairā. The Demā estate in this *pargana* extends over 183 square miles.

Barkol Tappā.—A *tappā* situated on the south-western boundary of the district along the right bank of the Kanhar. It comprises a hilly jungly tract of great natural beauty, but very sparsely populated.

Bisrāmpur.—A village situated 10½ miles north-east of Garhwā and 5 miles from the Garhwā Road railway station. The village, which is an important centre for local trade, contains a police outpost, Middle English school, and *dāk* bungalow. A market is held on Sundays. Bisrāmpur also contains the residence of a Bābuān family, which traces back its descent to the Mahārājās of Palāmau, the founder of the family being Nirpat Rai, a brother of Jai Kishun Rai, who held sway over Palāmau about 1750. Gajraj Rai, the son of Nirpat Rai, assisted the British in the capture of the Palāmau forts in 1772, and another member of the family, Bhawāni Baksh Rai, rendered good service in quelling the Kol rebellion in 1832. The present head of the family is Bābu Bhagwat Baksh Rai.

Chainpur.—A village situated 2 miles west-south-west of Daltonganj, with which it is connected by a good gravelled road. Population (1901) 2,792. It is one of the largest villages in the district, and the centre of a considerable trade; *daris* or coarse carpets and brass utensils are manufactured there. A market is held on Saturdays and during the season a large quantity of lac is brought for sale. The name Chainpur means the abode of rest.

Chainpur contains the ruins of an old fort and the residence of an influential family known as the Thākurais of Chainpur, who are the descendants of the Dīwāns of the Chero chiefs, and have on many occasions displayed great public spirit and loyalty to Government. The present head of this family is Rājā Bhagwat Dayāl Singh, a member of the Sarwār sept of Sūryabansi Rājputs. He traces back his descent to Rājā Dohsasan Singh, who left the ancestral home at Surpur about 300 miles south-west of Delhi, took service under the Emperor, and became a commander of the imperial forces. His son, Sarandhar Singh, migrated to the Shāhābād district, where he was put in charge of the fortress of Rohtāsgarh and obtained a grant of the *tālukas* of Dhaudānr and Tilothu. He built a fort for himself at Dhaudānr, and was succeeded by Mahkain Singh *alias* Deo Sāhi, who gave shelter to the Chero chief, Bhagwat Rai, when flying before the Emperor's forces. Thākurai Pūran Mal, the son of Deo Sāhi, accompanied the latter to Palāmau and assisted him in its conquest, the agreement between them being that in return for his services the Thākurai and his descendants should be the *Sarbarāhkārs* of Palāmau, *i.e.*, be given authority to manage the country, and should also have sole power to select its Rājās from among the descendants of Bhagwat Rai. This power they continued to exercise until the British conquest; and during the period of Chero rule, their influence was recognized by the Mughal Government, which conferred on the heads of the house the honour of a place near the imperial throne and also made them several *jāgīr* grants; *farmāns* of the Emperor Alamgīr, Muhammad Shāh and Farrukhsiyar making these grants are still in existence. One of the most famous of the line was Thākurai Amar Singh, who in 1721 headed a rebellion against the ruling chief, Ranjit Rai, defeated him in battle, and set up Jai Kishun Rai in his place. Amar Singh is also said to have defeated the Pindāris during one of their raids on the borders of Palāmau, and his descendants still possess a *nakkāra* or kettle-drum which he took from them. On his death, dissension again broke out, Thākurai Saināth Singh being treacherously put to

death by the Rājā; and his cousin Jaināth Singh thereupon collected an army, with which he defeated Jai Kishun Rai near Chetmā hill, and the latter being shot in the fight, placed Chitrajit Rai on the throne in 1764. When the British conquered Palāmau, the Thākurais lost the position of Dīwāns and virtual king-makers, but gave loyal aid to the Government. In the Sirguja campaign of 1802, the eldest son of Thākurai Rām Baksh Singh accompanied the British army; in the Kol rebellion of 1832 Chhattardhāri Singh rendered good service and personally took part in a fight at Lātehār; and in the Mutiny of 1857 Raghubar Dayāl Singh gave valuable assistance to Government, which was acknowledged by an *inām-i-jāgīr* grant of 26 villages, a *khilat*, and the title of Rai Bahādur. The present head of the family has assisted in putting down Korwā risings in Sirguja, and his services on these and other occasions have been recognized by the bestowal of the title of Rai Bahādur, and subsequently, in 1898, of Rājā. The Chainpur estate extends over 198 square miles.

Chhechhāri Tappā.—A *tappā* situated in the extreme south of the district, consisting of a large valley closed in on every side by hills. To the south it is overlooked by a lofty range of hills in Barwe; to the west the Jamīrā Pāt rises to a height of nearly 4,000 feet; on the east is the plateau of Netarhāt; and on the north is a spur crowned by the ancient fort of Tamolgarh, which is said to have been built by the Raksel Rājputs. The valley has a radius of about 7 miles, and presents the appearance of a great bowl ringed in by the plateaux of Sirguja and Netarhāt, the topmost heights of which are almost perpendicular and only penetrable in a few places. To the north is a narrow gorge, through which the drainage of the valley escapes by the Burhi or Barwe river. It seems probable that this valley must once have been an enormous lake of rare beauty. It contains a number of villages, the property of a zamīndār called the Bhaiyā Sāheb, whose estate was till lately managed under the Encumbered Estates Act.

Daltonganj.—Headquarters of the district, situated in 24° 3′ N. and 84° 4′ E. on the Koel river. Population (1901) 5,837. The area of the town is 2½ square miles, and it has a population, according to the census of 1901, of 5,837 persons. Daltonganj was founded in 1862 by Colonel Dalton, Commissioner of Chotā Nāgpur, and was named after him; the name is, however, commonly corrupted by the natives into Lāltenganj. It lies to immediate south of the Daltonganj coal-field and is connected with the East Indian Railway system by a branch

line known as the Bārun-Daltonganj Railway. The town contains the usual public offices, a hospital, district jail and a large market, the property of Government, the proceeds of which are made over to the municipality, which depends largely on them for its income. It is well provided with roads, lined with avenues of teak, mango and cork trees; these roads are gravelled and have a total length of 10 miles. The want of water was formerly very keenly felt during the hot-weather months, when almost all the wells in the town became dry; and accordingly water-works, called the Fraser Water-works after the present Lieutenant-Governor of Bengal, were installed in 1904. The town is the centre of local trade, and a large market is held on Wednesdays; an important fair lasting for a month (February-March) is also held annually under the auspices of Government. This fair is usually made an occasion for the meeting of all the leading zamīndārs, and for some delightfully primitive sports, elephant races and horse races, the latter invariably run off in heats, while there is often some good wrestling to be seen. The natural drainage of the town is good, and it is free from diseases due to a damp and waterlogged soil. Its most noticeable feature is its broad avenues and well laid out roads; the market is situated in a spacious square, the approach to which from the north is very picturesque, the road having dammed up a stream and been the means of forming a large lake. The town is now spreading into *jāgīrdāri* lands beyond the limits of the Government village in which it was founded.

Opposite Daltonganj on the western bank of the Koel is the village of Shāhpur, in which Gopāl Rai, the Rājā of Palāmau, built a palace at the end of the 18th century. Shāhpur stands on a high tract of land, and the ruined palace of the Rājā, the white temples and other masonry buildings, and the medley of red-roofed huts embowered in trees present a picturesque view from Daltonganj. A nearer view of the palace is disappointing, for what looks in the distance like an imposing edifice is seen to be a tawdry half-finished building of no architectural merits.

Deogan.—A village situated in the extreme north-east of the district. It contains the remains of an interesting old fort of the Cheros, to which reference has been made in Chapter II, and it is said that it was once a flourishing town with 52 streets and 53 bazars. The village has given its name to a *tappā* and also to an estate, extending over 298 square miles, the greater portion of which is contained in a fairly compact block situated in the north and east of the district. The estate, which at present is managed under the provisions of the Encumbered Estates Act,

is held by Rai Kishun Baksh Rai Bahādur of Nāwā Jaipur. It appears that one Bharat Rai formerly held Chaklā Deogan, which comprised 353 villages, as a maintenance grant from the Mahārājā of Palāmau; and when he was killed by a Sarwār chief in the course of some feud, it reverted to the Mahārājā in default of a male heir. The estate, having been thus resumed, was given as a maintenance grant to Sugandh Rai, a nephew of Jai Kishun Rai, Mahārājā of Palāmau, in addition to 74 villages already held by him, and has now descended to the present proprietor.

Durjāg Tappā.—A *tappā* in the south of the district, bounded on the west by the Koel river and on the south and east by reserved forests. It is one of the most beautiful parts of the district, consisting of a small valley surrounded by forest-clad hills; Government owns 23 villages with an area of 60 square miles. In the centre of the *tappā* is a large hill called Kāndi, the scene of the worship of the spirit called Durjagiā Deotā, which has been described in Chapter III; the officiating Baigā resides in the village of Harnāmānr.

Duthu Tappā.—A hilly *tappā* in the south-west of the district, inhabited chiefly by Orāons. A range of hills, forming a sort of plateau, runs from south-west to north-east through the *tappā*, of which the most prominent peaks are Bijkā, with a dome-like crest forming a landmark for many miles round, Hartā, Bhāgi, and Naukā—all offshoots from the Galgal Pāt.

Garhwā.—A town, situated on the Dānro river, 6 miles west of the Garhwā Road railway station and 19 miles north-west of Daltonganj, with which it is connected by a good road. Population (1901) 3,610. The town contains a police-station, dispensary, Middle English school, and travellers' rest house; and is the most important markets in the district, as it commands three different routes of trade, viz., the route to the Tributary State of Sirguja, the route to Mirzāpur and the route to Shāhābād and Gayā. It is the chief distributing centre for the surplus produce of the district, and of a great part of the goods brought from Sirguja State. Lac, resin, catechu, silk cocoons, hides, oil-seeds, *ghi*, cotton and iron are here collected for export; the imports are food-grains, brass vessels, piece-goods, blankets, silk, salt, tobacco, spices, drugs, etc. The market is held in the dry season on the sandy bed of the Dānro river. The town is surrounded on three sides by the Dānro and Saraswatī, and is said to derive its name from the fact that it is built on low land. For some time there were a municipality and a Bench of Honorary Magistrates here, but both have long since been given up.

Goāwal Tappā.—A *tappā* situated in the centre of the district along the west bank of the Koel river. The tract comprised within the *tappā* is undulating and broken up by numerous streams, which rise from the hills to the south and flow northwards into the Koel, irrigating the rice-fields through which they pass. It is traversed by two roads leading from Daltonganj on the east and Rankā on the south to the adjoining market of Garhwā. It contains 26 Government villages with an area of 10½ square miles.

Haidarnagar.—A village situated in the north-east of the district on the Garhwā-Bārun road, 5 miles south-west of the Japlā railway station. Population (1901) 2,757. The village was founded in the 18th century by Saiyid Nabi Alī Khān, the son of Nawāb Hedayat Alī Khān, after his father had founded Husaināhād. It contains a dispensary, and a large market is held on Thursdays and Fridays.

Hariharganj.—A village situated on the Daltonganj-Gayā road, 43 miles north-east of Daltonganj, adjoining Mahārjāganj on the borders of the Gayā district. It contains a dispensary, police outpost and District Board bungalow, and is an important *entrepot* for the trade in rice and grain; but it is losing much of its importance now that the Bārun-Daltonganj railway has been opened. It also contains the residence of one of the descendants of Udwant Rām Kānungo, who played a prominent part in the negotiations which led to the establishment of British rule in Palāmau.

Husaināhād.—A village situated 32 miles north-east of Garhwā on the Garhwā-Bārun road in the extreme north-eastern corner of the district. Population (1901) 3,904. The place, which is so named after Husain, one of the grandsons of Muhammad, was founded in the early part of the 18th century by Nawāb Saiyid Hedayat Alī Khān, Deputy Governor of Bihār and the father of the author of the Sair-ul-Mutākharin; two descendants of the Nawāb still reside in the village. It is an important centre of trade and contains a police-station and District Board bungalow. Husaināhād is built on the site of the old village of Japlā Dināra, and the railway station here is known as Japlā; it is situated 2 miles from the Son, and commands a good view of the Rohtāsgarh plateau on the other side of that river. A large market is held on Sundays and Thursdays.

Imlī Tappā.—A *tappā*, situated a little to the east of the centre of the district, bounded on the south by the Amānat river and on the north by a range of hills, from which many streams flow southwards to that river. The *tappā* contains some of the most fertile land in the district and is well served by irrigation works;

Government owns 12 villages entirely and is part owner of three others, with an aggregate area of 12½ square miles. The principal village is Pātan, the headquarters of a police station, and the most important Government village is Murmā, where there is a block of protected forest.

Japlā.—The ancient name for Husainābād (q. v.), from which the *pargana* lying to the north of the district along the Son also derives its designation. It must once have been the seat of some local chiefs, probably belonging to the Kharwār tribe, who are still found in this district and formerly occupied the plateau of Rohtāsgarh and the adjacent highlands in Shāhābād. As stated in Chapter II, records have been found of two of these chiefs dating back to the 12th and 13th century A.D., when they held possession of the fortress of Rohtās and of the country to the north of Palāmau. Japlā occurs again in Shāh Jahān's time among the *parganas* forming the *jāgīr* of the commander of Rohtāsgarh, and is also mentioned in Todar Mall's rent-roll in the Ain-i-Akbarī. The *pargana*, which has an area of 182 square miles, was transferred from the Gayā district in 1871.

Khāmhī Tappā.—A *tappā* situated in the south of the district. It comprises a small valley surrounded on all sides by hills and reserved forests, except to the west, where a small portion is bounded by Tappā Saneyā. It contains 13 Government villages with an area of 6 square miles. There is a very picturesque view at Nuranago, where the Koel, flowing from east to west, bends almost at right angles round a long range of hills, and then pursues a northerly course through the heart of the district.

Kot Tappā.—A *tappā*, situated in the valley of the Amānat in the centre of the district; it comprises some of the richest land in the district, and is almost entirely under cultivation. It contains 37 Government villages with an area of 25 square miles; the principal markets are Daltonganj and Lesliegaaj.

Lātehār.—Village situated in the south-east of the district on the 41st mile of the Daltonganj-Rānchī road. Population (1901) 1,883. It contains a Government estate *tahsīl* office, police station and dispensary, and is a centre of the lac trade. A large annual fair, lasting 10 days, is held here in the month of Phāgun to celebrate the Sivarātri.

Lesliegaaj.—A village situated on the Daltonganj-Sherghāti Road, 10 miles east from Daltonganj. Population (1901) 670. It was founded by, and derives its name from, Mr. Leslie, Collector of Rāmgarh, at the end of the 18th century. At that period it was a military station in which a detachment of troops was cantoned, and on this account is known locally as Chhauni,

i.e., the cantonment. Between 1859 and 1863 it was the headquarters of the Palāmau subdivision. The village contains a Government estate *tahsil* office, District Board bungalow, and a police outpost, located in one of the old military buildings which was besieged during the Mutiny of 1857; a weekly market is held on Sundays.

Mahuādānr.—A village situated in the extreme south of the district in the Chhechhāri valley. It is the headquarters of the thāna of the same name and also of a Catholic Mission. This Mission was founded in 1895 by Father Dehon, who built a bungalow, school and church there; a boarding house is attached to the school, at which some 200 boys are taught. The church is an imposing edifice, which is a marvellous illustration of the resources and genius of the Father in overcoming the difficulties of labour and materials. A picturesque sight meets one, after penetrating the miles of forest that separates the small basin of Chhechhāri from the rest of Palāmau, when one comes on this open piece of country hemmed in on all sides by an imposing plateau, and at the far end sees what looks at a distance like a cathedral. A nearer view discloses a beautifully proportioned church with a graceful spire; in the interior similar architectural skill is evidenced; and all this was built brick upon brick, with no plan other than that carried in the Father's brain, no funds beyond those contributed from time to time by well-wishers, and no skilled labour except what he himself had trained. Here Father Dehon laboured for the remainder of his life; and it was while returning here, in spite of ill-health, that he died in the train of heat-apoplexy at Rajharā in 1905.

Mankerī Tappā.—A *tappā* situated in the south-east of the district. It is bounded on the north by the Aurangā river and on the south and south-west by hills, from which numerous streams flow northwards to the Aurangā. The most important market in the *tappā* is Nāwāgarh, and Government owns 30 villages with an area of nearly 17 square miles. In the village of Narayanpur there is a small fort, built on the top of a low hill, to which a curious legend attaches. It is said that it was built by an ancestor of the family, known as the Pathrā Thākurs, to whom the village belongs, and that if any of them approaches it, he will die there suddenly as a penalty for the neglect of his forefathers in not making due offerings to the soul of its builder. The fort is consequently neglected and is overgrown with jungle.

Nagar Untāri.—*See* Untāri.

Nāwā.—Village situated 20 miles north-east of Daltonganj on the road from that place to Hariharganj. Population (1901)

1,237. The village contains a District Board bungalow, and a fair trade is carried on in country produce.

The village of Nāwā Jaipur, 8 miles from this place and about 18 miles east of Daltonganj, contains the residence of Rai Kishun Baksh Rai Bahādur, who traces back his descent to Sugandh Rai, nephew of Jai Kishun Rai, one of the descendants of Mahārājās of Palāmau. He owns the interesting old fort of Deogan and is one of the largest landed proprietors of the district, but his estate is, at present, managed by the Deputy Commissioner under the provisions of the Encumbered Estates Act. An account of the estate will be found in the article on Deogan.

Netarhāt.—A plateau, situated in the extreme south of the district, which rises to a height of 3,356 feet above sea level. The base is formed of massive felspathic granite, which is exposed to within about 420 feet of the summit. Laterite then appears, and then boulders of trap within 180 feet of the summit, after which laterite only is seen. The plateau is about 4 miles long by 2½ miles broad, but its total area does not exceed about 7 square miles. The central southern portion forms a basin traversed by a perennial spring running from south to north. There is a large stretch of *sāl* forest intermingled with bamboo groves on the north, close to which large herds of bison may be seen grazing in the quiet hours of the summer mornings and evenings, keeping a watchful lookout to the south where the villagers' hamlets lie. Until 20 years ago tea used to be grown on this plateau. The climate is delightful, but somewhat feverish.

Palāmau.—Palāmau, situated on the Aurangā river about 20 miles south-east of Daltonganj, is the most interesting place in the district from a historical and archæological point of view; for it was for many centuries the seat of the Chero chiefs, and it contains the ruins of two great forts built by them. The walls, which are in fair preservation, are about 5 feet in thickness, and those in the old fort bear marks of cannon balls and bullets in many places. The gate leading into the old fort, the court-room, temple, and zanāna quarters of the Rājās, as also two deep wells in the old fort (now silted up), are very interesting. Most interesting of all, however, is a massive gateway of rare beauty in the new fort, known as the Nāgpuri gate. This gateway, which is made of delicately carved stone, is said to have been imported at great expense by Medni Rai, the greatest of the Rājās of Palāmau, after he had sacked the palace of the Mahārājā of Chotā Nāgpur; it was placed at the southern extremity of the fort, but as this aspect was declared to be unlucky, the entrance was bricked up, the beautiful carving being left where it was.

The gate is now being repaired at Government expense. Both forts lie within Government reserved forests, and in many places are covered by jungle. They are a favourite haunt of tigers, and at least one visitor has had his feelings of admiration at the beauty of the gate dashed by being told that there was a tiger lurking at the foot of the wall. When such an animal becomes notorious in the neighbourhood, he is invariably known as the Lord of the Fort.

The following is a more detailed account of these forts taken from the Report of the Archæological Survey, Bengal Circle, for 1903-04:—"There are two forts at Palāmau, inside the jungle, close to each other. They are distinguished by the names Purāna Kilā and Nayā Kilā, although both appear to be of about the same age. The style of the walls and buildings so closely resembles that at Rohtāsgarh and Shergarh that both forts may safely be put down to the same time, viz., the beginning of the Mughal period. The old fort is of rectangular shape, about one mile in circumference. The ground upon which it stands rises in terraces. The higher part is divided from the lower one by a cross wall. The walls are in places of considerable thickness, about 8 feet, the pathway on the top between the battlements measuring 5 feet 6 inches. In other places they are thinner. The four gates are strongly fortified with inner and outer courts and provided with watch towers. The outer battlements of the walls are loop-holed. Inside are the remains of four two-storied houses and a mosque with three domes. The inner cross wall has one gate, in front of which is a deep well cut out of the rocks with a vaulted tunnel leading down to it. The walls are built of stones and concrete, like those at Rohtāsgarh and Shergarh. The houses are plastered over, and remains of paintings and stucco ornamentation are seen here and there. In all these respects, the buildings closely agree with those in the other hill forts, already referred to. I observed one statue of a Buddha close to the eastern gate and another broken Hindu of Buddhist idol, but no temple was found by me.

"The new fort is built around the slopes of a conical hill. There are two lines of walls, each making up a square. The inner line clusters around the peak of the hill; the outer line is somewhat lower down. The walls are of the same kind as in the old fort. The outer walls are of considerable breadth, the passage along the roof between the battlements measuring 14 feet, and the total breadth amounting to 18 feet. There are no separate buildings inside the enclosure, but the walls have galleries, open to the interior, sometimes of several stories. The

most interesting object is a fine stone-carved window about 15 feet high. There is nothing to match this either at Rohtāsgarh or Shergarh. The carving is distinctly of the Mughal type. Another similar window close to it is broken, and some walls near it also have fallen down and now block up the passage, so that it is difficult to get a view of this excellent piece of carving."

Palāmau Pargana.—A large *pargana* occupying the centre and south-west of the district. It is divided into the following 25 *tappās*:—in the north Deogan; in the south Simā, Chhechhāri, Bāresānr, Khāmhī, Saneyā and Durjāg; in the south-east Mankeri and Tappā; in the south-west Udaipur, Uchri, Barkol, Duthu, Chhatki and Katrī; in the east Matuli and Pundāg; in the west Khaparmanda and Untāri; and in the centre Bāri, Tariā, Goāwal, Taleya, Kot and Imlī.

Pānki.—A village near the eastern border of the district, situated 30 miles east of Daltonganj. Population (1901) 224. It contains a police outpost and is the centre of a considerable trade in rice, grain and lac and oil-seeds; a large market is held on Fridays.

Pundāg Tappā.—A *tappā* situated in the east of the district along the valley of the Amānat. It is one of the most fertile tracts of the district and contains 9 markets, viz., Tarhasi, Pānki, Padmā, Tetrain, Harilaung, Manātu, Kordā, Kasmār, and Loharsi. The *tappā* contains 78 Government villages with an area of 32 square miles.

Rajharā.—A village and railway station situated 10 miles north of Daltonganj. The village contains the colliery of the Bengal Coal Company, which works the Daltonganj coal-field from this place. A dispensary is maintained for the employés.

Rankā.—A village situated 14 miles south of Garhwā, with which it is connected by road. Population (1901) 2,066. It is the headquarters of a police station, and contains a District Board bungalow and a dispensary established by Rājā Gobind Prasād Singh; tradition says that the village derives its name from the fact that one of his ancestors supported a large number of beggars (*rank*). The locality is regarded as unhealthy owing to the extensive jungles in the neighbourhood, but these jungles contain some of the best shooting grounds in the district.

The present head of the family is Rājā Gobind Prasād Singh, a member of the Sarwār sept of Sūryabansi Rājputs. He is a descendant of Pūran Mal, the first Dīwān of Palāmau and founder of the line of king-makers, of which an account has been given in the article on Chainpur. Like the Chainpur family, the Thākurais of Rankā have given loyal assistance to the British

Government since it first conquered Palāmau. In 1780 Thākurai Sheo Prasād Singh helped in quelling a rebellion, and in 1802 served in the Sirguja campaign. His grandson Thākurai Kishun Dayāl Singh rendered good service in the mutiny of 1857 and was rewarded with a grant of 21 villages, a *khilat* and the title of Rai Bahādur. The loyal assistance given to Government by the present head of the family, and his liberality and public spirit, have been recognized by bestowing upon him, in 1907, the title of Rājā. The Rankā estate extends over 416 square miles.

Satbarwā.—Village on the Daltonganj-Rānchī road, situated 17 miles south of Daltonganj. Population (1901) 772. It contains the remains of some old temples and is a centre of the local trade in *ghī*, *gur* and oil-seeds; a weekly market is held on Wednesdays.

Shāhpur.—*See* Daltonganj.

Simā Tappā.—A *tappā* situated in the extreme south of the district comprising an elevated valley surrounded on all sides by lofty hills and high plateau. The river Koel runs through the centre of the valley, which is bounded on the north-west and south by blocks of reserved forests. Government owns 55 villages with an area of 41 square miles in the *tappā*; the principal markets are Gāru, which contains a police outpost, and Sarju. This is probably the most beautiful of the many beautiful *tappās* of Palāmau, scenes of rare beauty being met with in the rocky reaches of the Koel.

Sirhe Tappā.—A small *tappā*, subordinate to *tappā* Untāri, situated to the west of the district. The principal market in this *tappā* is Garhwā.

Sonpurā.—Village situated in the extreme north of the district about a mile from the junction of the Koel and the Son. Population (1901) 1,416. The village contains the residence of one of the leading zamīndārs of the district, whose ancestors were known as Rājās of Sonpurā. According to the family records, they trace back their descent to Rājā Nar Narayan, who resided at Mahuli in the district of Gorakhpur. Rājā Rāma Narayan, the ninth of the line, migrated to the district of Shāhābād, where he obtained possession of *parganas* Chainpur and Chausā and made Torī Bhagwānpur the family seat. These two *parganas*, it is said, were granted, as a reward for good service, to the ancestor of the present Rājā of Bhagwānpur by the eleventh Rājā, Dhavala Pratāpa, who then went to Rohtāsgarh and ruled there; this Rājā appears to be the same as the chief mentioned on page 16. In the beginning of the 18th century Kindra

Sāhi, who is said to have been the 50th of the line, acquired the *parganas* of Japlā and Belaunjā by a *sanad* from the Emperor of Delhi and migrated to Sonpurā, where his descendants have resided ever since. The family have records in their possession dating back to the time of the Mughal Government and the early days of British rule. When the British force marched into Sirguja in 1801, in order to quell a Chero rebellion, it was joined by an detachment under Rājā Bhūp Nāth Sāhi; and Captain Roughsedge acknowledged his services with the remark that "from beginning to end he fought under me and assisted me in every engagement, accompanied by his own armed men and force." A letter from the Marquis of Wellesley dated August, 1803, shows that the Rājā was directed to guard the passes in his estate against any force which might be sent by Rāghujī Bhonslā; and some years later he was directed by the Marquis of Hastings to guard them against the Pindāris "displaying his usual zeal and bravery." The family has long since lost the greater part of their estates, and what remains is heavily indebted and is now managed by the Deputy Commissioner under the Encumbered Estates Act. The present representative of the family is Bābu Bisambar Nāth Sāhi; the estate, which extends over 183 square miles, is known as the Demā estate. The village contains a post office and Upper Primary school.

Taleya Tappā.—A *tappā* situated in the centre of the district, containing the village of Chainpur. It consists of two distinct tracts, the northern half being well cultivated and the southern half hilly and sparsely populated.

Tappā Tappā.—A *tappā* situated in the south-east of the district, bounded on the south by the Aurangā river and on the north by the Torī *pargana*. It obtains its name from a high hill in the centre; the principal market is Lātehār. Government owns 19 villages with an area of 11½ square miles in this *tappā*.

Torī Pargana.—*A pargana* in the south-east of the district extending over an area of 664 square miles, conterminous with the Bālumāth thāna. It forms part of the Chotā Nāgpur estate, being the *khorposh* or maintenance grant of a half-brother of the Mahārājā of Chotā Nāgpur. Its tenures, people and customs approximate to those of the neighbouring *parganas* of the Rānchī district, from which it was transferred in 1892 to the newly-formed district of Palāmau.

Untāri.—Village in the north-west of the district, situated 24 miles west-north-west of Garhwā. Population (1901) 1,690. The village contains a police outpost and District Board bungalow, and a large market is held on Tuesdays, at which a brisk

trade is carried on in rice, grain and oil-seeds. It also contains the residence of one of the leading zamīndārs of Palāmau, who bears the title of Bhaiyā. The Bhaiyās are a branch of the Sonpurā family, being the descendants of the elder wife of one of the Rājās, and the title is explained by the following tradition. In the Sonpurā family it is a custom for the first born son to succeed, whether born of the elder or younger wife, but custom also decreed that the question of succession should be decided at once and the heir installed immediately after the Rājā's death One of the Rājās is said to have died suddenly while his son was away on an expedition. On his arrival, he found that his younger brother had already been installed, and he thereupon went away to Untāri, where he carved out a property for himself. Ever since, he and his descendants have been known by the name of Bhaiyā or brother. The Untāri estate extends over 48 square miles. There is a handsome temple in the village dedicated to the god Bansidhar, a title of Krishna, which contains a golden idol said to have been found lying in the jungle in the time of the great grand-father of the present Bhaiyā. A large *melā*, lasting about a fortnight, is held annually in Phāgun in honour of the god.

INDEX.

A.

B.

C.

D.

E.

F.

L.

M.

N.

R.

S.

B. S. Press—10-5-1907—10801—520—E. J. H.